

Professional Liability For Construction in Flood Hazard Areas

Jon Kusler, Esq. 518-872-1804; jon.kusler@aswm.org

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PREFACE

The following legal paper addresses the liability of architects, engineers, landscape architects, surveyors, floodplain managers and other professionals in designing or constructing structures that are subsequently damaged by flooding or that damage adjacent properties by increasing flood heights or velocities. It also briefly considers the liability of landowners, contractors, builders, banks, real estate brokers, and insurance agents.

The initial sections of the paper explore professional liability. The final section makes recommendations for staying out of legal trouble.

The paper is based, in part, upon earlier reports and articles prepared by the author including J. Kusler, *Construction in Flood Hazard Areas: Legal Liability*; J. Kusler and R. Platt, *The Law of Floodplains and Wetlands, Cases and Materials*; J. Kusler, *Avoiding Public Liability in Floodplain Management*, and J. Kusler, *The Law of Floods and Other Natural Hazards*. It is also based upon an examination of recent case law, treatises, law review articles, statutes, regulations and other relevant legal materials.

The paper considers broadly the law in the U.S. and not that of a particular jurisdiction. It should not be considered legal advice. We suggest that you contact a local lawyer if you want guidance with regard to the law in a particular jurisdiction.

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We hope you find the following paper useful.

Jon Kusler, Esq.

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PART 1: INTRODUCTION

Liability and the Design Professional

How can you as a design professional¹—architect, engineer, landscape architect, surveyor-- avoid or reduce liability for flood or erosion damage? How can you keep your client—the homeowner, developer, contractor, governmental unit—out of trouble?

These are common and increasingly troublesome questions for design professionals and their clients. Over the last fifty years, courts have broadened concepts of liability in practically every context in which a designer or manufacturer has control over a process, product or activity that results in injury which could be avoided. This includes but is not limited to structures and activities in flood prone areas.

The Federal Emergency Management Agency estimates that 10 million U.S. households are located in areas of significant flood risk.² Five million persons hold flood insurance policies in 20,200 communities.³ A single flood event such as the Midwest Flood of 1993 may affect tens of thousands of properties. The Midwest Flood damaged 49,000 homes, caused 16 billion dollars in damages, and killed 50. Hurricane Katrina in 2005 damaged more than 800,000 homes⁴, caused more than 200 billion in damages, and killed more than 2,805.

Severe flooding from prolonged rain, snow melt, hurricanes, or winter storms affects major rivers and streams, the Great Lakes, and the coasts. However, almost all lands even

¹ Courts have applied the term "design professional" primarily to architects, engineers, landscape architects, and surveyors. The paper which follows focuses upon the liability of these groups. However, most of what has been written applies equally to floodplain managers, land use planners, water resource planners, geologists, hydrogeologists, biologists, botanists and a wide range of other consultants who provide expert advice to landowners and governmental agencies concerning the utilization of floodplain areas or carry out activities within floodplain areas (e.g., construct buildings, roads, bridges; approve permits). Similarly, much of what has been written applies also to contractors and builders. All may be held liable in some circumstances for breach of contract or for negligence which results in flood damages. See, for example, Bodin v. Gill, 117 S.E.2d 325 (Ga., 1960) in which the court stated the broad rule of law which applies to not only architects and engineers but other professional services. The court stated that "The law imposes upon persons performing architectural, engineering, and other professional and skilled services the obligation to exercise a reasonable degree of care, skill, and ability, which generally is taken and considered to be such a degree of care and skill as, under similar conditions and like surrounding circumstances, is ordinarily employed by their respective professions." However, the standards of care and the proof required differ. Design professionals are held to a standard of care consistent with the minimum standard of care in their profession and expert testimony must usually be used to establish this standard of care. See Lochrane Eng v. Willingham Realgrowth, 552 So.2d 228 (Fla., 1989) This may or may not be true for others who perform services but lack professional status.

² See generally the FEMA web page at http://www.floodsmart.gov/floodsmart/pages/statistics.jsp

³ Id. http://www.fema.gov/business/nfip/statistics/cy2005pif.shtm.

⁴ See generally HUD, Current Housing Unit Damage Estimates: Hurricanes Katrina, Rita, and Wilma, (2006). See http://www.dhs.gov/xlibrary/assets/GulfCoast HousingDamageEstimates 021206.pdf.

those in arid regions are to a greater or lesser extent subject to flooding, albeit on an infrequent basis.

Landowners, subdividers, builders, and government agencies consult design professionals when they wish to construct a house, commercial structure, bridge, dam or other structure. Many of these individuals and organizations do not realize that their properties are subject to flooding. They may also consult design professionals when they rebuild structures in flood prone areas after hurricanes, winter storms and other natural hazard events.

Design professionals may be sued for flood damages⁵ and associated costs by a wide range of individuals—the landowners, subdividers, and builders who hire them, contractors, subcontractors, adjacent landowners, the users of government property (e.g., a campground in a flash flood area), tenants, and injured employees.

Increasing Suits

Over the last two decades, damage resulting from construction in flood hazard areas has become a prime candidate for liability suits for several reasons:

--Rule of Reasonable Use. Courts have replaced the common enemy doctrine for diffused surface waters with a rule of reasonable use in many states. Landowners and their design professionals may not, with their designs or other activities, "unreasonably" discharge surface waters onto other lands as well as block flood flows or increase flood heights and velocities in rivers, streams, and other watercourses.

--Adoption of Regulations. More than 20,100 local governments and many states have adopted floodplain regulatory standards for elevation or floodproofing of new structures and protection of floodway capacity. Failure to comply with these standards in design of a building, grading, fill or other activities will usually constitute a breach of a design contract or (at a minimum) establish a prima facie case of negligence if damage results from such a failure.

--Availability of Design Guidance. Many flood-related design manuals have been published at the national and state levels by agencies such as the Corps of Engineers and the Federal Emergency Management Agency including manuals with recommended

⁵ Compensable "damages" may include, depending upon the legal cause of action and factual situation: financial losses to damaged structures and activities, personnel injuries, loss of profits, pain and suffering, and legal fees and court costs. In some instances they may also include "punitive" damages.

⁶ See, e.g., See, e.g., County of Clark v. Powers, 611 P.2d 1072 (Nev., 1980).

⁷ See FEMA web site at http://www.fema.gov/plan/prevent/floodplain/index.shtm. See, more specifically, FEMA, National Flood Insurance Program, Program Description (2006) http://www.fema.gov/library/viewRecord.do?id=1480

⁸ See, e.g., Distad v. Cubin, 633 P.2d 167 (Wyo., 1981) for a discussion of rules of law pertaining to failure to comply with statutes and/or regulations. See also more discussion in footnotes 36-40 and accompanying text below.

flood-proofing and construction practices. These materials are now also widely available on the Internet. The design professional can no longer claim ignorance or lack of information concerning floodproofing and other flood loss reduction design techniques and, it may be argued, that a "national" standard of care now applies to many flood-related design issues.

--Enhanced Standard of Care. Design professionals throughout the nation have applied increasingly sophisticated elevation and floodproofing techniques to reduce flood damage to structures. They have also, increasingly, applied sophisticated flood routing techniques to determine flood heights and velocities and erosion potential. These efforts have established high standards of care and "expertise" in the design profession "community". In addition, many state and community regulations now exceed the minimum Federal Emergency Management Agency standards for construction in flood hazard areas. These regulations and practices establish an enhanced standard of care for particular areas. Many communities that have adopted the International Building Codes or the NFPA codes have also adopted enhanced floodplain construction standards dealing with freeboard, use of flood resistant materials, and the design of critical facilities.

--Implied Warranty. Courts have recognized an implied warranty of habitability or suitability for new residential structures in most states. See discussion below. Courts have also more broadly recognized fraud and misrepresentation as the basis for law suits when sellers conceal flood hazards or do not divulge known flood hazards. Developers and sellers are now, in many contexts, liable to buyers for flood damage.

On the other hand, design professionals have also made efforts to limit liability. Design professionals are increasingly careful not to warrant total protection from flooding or other hazards in design contracts. Design professionals have increasingly added "freeboard" and other safety factors in their designs. Design professionals have successfully urged state legislatures in most states to adopt statutes of "repose" or "limitation" These limit the time period in which design professionals may be sued after the design is completed (e.g., statutes of "repose") or the flood injury becomes known (e.g., statutes of limitation). States have also adopted "tort claim" acts limiting the liability of governments for discretionary decision-making including permit approvals and the design of public roads and bridges.

⁹ For an extensive list of FEMA publications available on the Web see http://www.illinoisfloods.org/documents/Publication_Form_with_URLs.pdf See also http://edis.ifas.ufl.edu/DH203 which contains a list of FEMA and other publications on flood resistant design and construction.

¹⁰ Today, sophisticated modeling techniques facilitate proof of causation and allocation of fault although proof may still be difficult. See, e.g., Lea Company v. North Carolina Board of Transportation, 304 S.E.2d 164 (N.C., 1983).

¹¹ FEMA reports that 68% of the communities participating in its Community Rating System (about 1000 communities) have adopted regulations exceeding FEMA's minimum standards. The Community Rating System is a point system of the National Flood Insurance program that reduces insurance premiums for participating communities. See generally http://training.fema.gov/EMIWeb/CRS/m1s6main.htm

¹² See cases cited in notes 86-91 below and accompanying text.

¹³ See cases cited in notes 154-157 and accompanying text.

If design professionals are sued, courts hold that experts qualified in the field are usually needed to determine whether the design professional failed to meet contract obligations or was negligent in carrying out his or her duty. However, a court may make a finding of negligence for failure to carry out a duty without expert opinion if the professional has failed to inform himself of basic facts or if the facts are such that a layman is as competent as an expert to judge whether or not a particular design created an unusual risk. It is worth noting that typically the final judgment as to whether a design professional is negligent is in the hands of a jury as opposed to the judge's role to interpret law. Juries often favor injured parties, particularly when defendants are corporations, their insurance companies, or government agencies.

The following paper primarily explores the liability of design professionals for flood, drainage and erosion problems. However, it also addresses, to a lesser extent, the liability of their clients—landowners, contractors, builders, real estate brokers, banks, and insurance agents. Often individuals who are damaged by flooding or erosion due to construction of a building, levee, dam or fill or grading sue these clients. Clients, in turn, sue their design professionals.

It is to be noted, again, that the rules of professional liability differ somewhat from one jurisdiction to another. The controlling law is the law of state in which a project is located or the law of the state in which damage is done or a contact is negotiated.

We suggest that you contact a lawyer if you want legal advice on a specific jurisdiction. We also suggest you and your attorney consult the publications and web pages listed in the appendices of this paper.

PART 2: LIABILITY OF A DESIGN PROFESSIONAL TO HIS OR HER CLIENT

Are you as an architect, landscape architect, engineer or surveyor, liable to your client for the design of a structure which is subsequently damaged by flooding?

A builder or homeowner may sue a design professional ¹⁷ for flood damages based upon two principal theories:

- (1) The design professional failed to carry out the terms of the contract, and/or
- (2) The design professional was negligent.

As will be discussed in Part 3, a third party may also sue a design professional based, primarily, upon negligence.

¹⁴ See Seiler v. Levitz Furniture Co., Etc. 367 A.2d 999 (Del., 1976).

¹⁵ See, e.g., City of Eveleth v. Ruble, 225 N.W.2d 521 (Minn., 1974) in which the court stated that expert opinion is not needed if "it is clear that the failure of the professional to ascertain the facts before recommending a solution to the problem was an omission inconsistent with the professional obligation assumed...."

¹⁶ Id., See also Seiler v. Levitz Furniture Co., Etc. 367 A.2d 999 (Del., 1976).

¹⁷ We are using the term "design professional" broadly in this paper to apply to engineers, architects, surveyors, and landscape architects. See also footnote 1.

Liability Based on Breach of Contract

A design professional can limit liability to a client largely through the contract between the design professional and the client. The primary relationship between the design professional and his or her client is one of contract. Yet, ambiguities are common in contract language and a contract will often not protect against a negligence suit or third party liability (e.g., flooding of an adjacent landowner).

The primary test for determining whether the design professional has adequately performed his or her design duties for the client is conformance with terms of the contract. The contract typically sets forth the design professional's duties and, to a lesser extent, how they are to be carried out. Contract standards, where vague, are supplemented by terms furnished by law and oral understandings.

A design profession is liable for subsequent flood damage if he or she warrants that a design will protect against flooding¹⁸ or to an agreed upon flood elevation and it fails to do so. Conversely, the design professional is also not ordinarily liable to the client where the terms of the contract expressly exclude any liability for flood damage. But, the common situation lies in between: the design contract contains provisions requiring the design professional to perform "reasonably" and to comply with all applicable codes including floodplain regulations. These typically include local floodplain regulations requiring elevation or floodproofing of structures in the floodplain to the 100 year flood level and protection of a regulatory floodway reflecting no more than a one foot of rise in flood waters. Many states and local governments have also adopted more stringent regulations such as "freeboard" requirements for elevation of new structures on fill or floodproofing of structures to 100 year flood elevation, a "zero rise" floodway, and prohibition of residences in floodplains or at least floodways.

Liability Based on Negligence

A design professional may also be held liable because he or she has been "negligent". As common law, all members of society (not just design professionals) must act reasonably so as not to injure other members of society. If they do not act reasonably and injuries result, they may under certain circumstances be sued for negligence.

Negligence in design or failure to provide contracted services can be based on incomplete design specifications or services as well as complete but erroneous ones. ¹⁹ It is not sufficient for a design professional to perform as well as he or she could. The design professional must have done what the reasonable design professional of ordinary

¹⁸ See generally Early v. O'Brien, 51 App. Div. 569 (N.Y., 1900). In this case a contractor had agreed to provide watertight construction in a building contract, and was held by the court to such a performance standard although there was no showing of lack of care or negligence.

¹⁹ See, e.g., Trusky v. Holoway, 14-04-00196-CV (Texas, 2205) in which the court held a surveyor liable on negligence and Deceptive Trade Practices Act causes of action to a landowner for failing to tell the landowner that a property was in a floodway. He did indicate that the property was in a floodplain.

prudence in the profession would have done. As will be discussed in greater depth below, the standard is usually one of the design community as a whole, but a higher standard may be applied where the design professional has made special representations, where statutes or ordinances establish a higher standard than is customarily used, or in cases in which a particularly great or grave risk of harm is involved. For example, an Illinois court²⁰ rejected defenses of mechanical engineers that they had used adequate care in designing a supermarket pylon that collapsed in a high wind (perhaps exceeding 80 miles an hour) causing injuries. Noting that the pylon was located where collapse might injure customers, the court held the engineers to a particularly high standard of care. The court noted:

The central issues revolve around a charge that defendants failed to exercise the degree of care in performance of professional duties imposed upon them as members of a licensed profession which exists in large part to prevent harm to the public from structurally unsafe buildings. The building in question was certified as structurally adequate. It was to be occupied and used by the public for business purposes and the defendants knew it.²¹

The standard of care which a design professional must exercise to avoid liability for negligence is similar to the standard of care which the design professional must exercise under contract law to avoid breach of contract. The design professional must act "reasonably" to avoid liability under both negligent and contract theories. However, the legal theories (contract and tort) are conceptually different and so are some of the defenses (e.g., "contributory negligence" for a negligence-based suit but not for based upon contract).

Standards of Care

Courts apply several types of "standards of care" to determine whether a design professional has carried out his or her responsibilities: (1) specifications and performance guidelines contained in the contract; (2) application of a process based standard focusing upon the reasonableness of the process used by the design professional to accomplish the client's objectives; and/or (3) examination of the suitability of the finished product for its intended uses based on a theory of implied or explicit warranty.

Performance Specifications and Guidelines. The first type of standard—performance guidelines and specifications—are set forth in the contract and may be highly specific such as specifying the flood protection elevation or the use of particular materials such as "hurricane straps" to insure the roof and structural integrity of a structure. A contract will be breached if design profession does not design consistent with the performance guidelines and specifications. For example, an engineer is liable if he agrees to design and construct a bridge for heavy vehicles sufficient to provide access during a 100 year

²¹ Id.

²⁰ Laukkanen v. Jewel Co., 222 N.E. 2d 584 (Ill., 1966); See also Johnson v. Salem Title Co., 425 P.2d 519 (Ill., 1967).

flood and the engineer designs only for light vehicles.²² Contracting parties are bound by the terms of their contracts even if flooding or other contingencies make performance more expensive than originally anticipated.²³ The architect/engineer has limited discretion in modifying these specifications without permission of the client.²⁴

Process-Oriented Professional Standard. The second, process-oriented professional standard may be based upon both common law and contract concepts and requires that the professional exercise such care, skill, and diligence as members of that profession "ordinarily exercise under the circumstances." The professional standard is, essentially, one of "reasonableness" within the factual context. Architects and engineers are required not only to exercise reasonable care in what they do, but to possess a minimum standard of special knowledge and ability. The standard of care depends, more specifically, upon the practices of the community in which the design professional carries out his or her practice. As one court stated: As one court stated:

The standard is rather that of persons engaged in similar practice in similar locations, considering geographical location, size, and character of the community in general... Such allowance for the type of community is most frequently made in professions or trades where there is a considerable degree of variation in the skill and knowledge possessed by those practicing in different locations.

It is to be noted that design professionals do not warrant a perfect design ²⁷ (unless they place such a warrant in their contract). As a court stated, "Unless he represents that he has greater skill or knowledge, one who undertakes to render services in the practice of a

An architect is bound to perform with reasonable care the duties for which he contracts. His client has the right to regard him as skilled in the science of construction of buildings, and to expect that he will use reasonable and ordinary care and diligence in the application of his professional knowledge to accomplish the purpose for which he is retained. While he does not guarantee a perfect plan or a satisfactory result, he does by his contract imply that he enjoys ordinary skill and ability in his profession and that he will exercise these attributed without neglect and with a certain exactness of performance to effectuate work properly done.

²² See Moore v. Bird Engineering Co., 41 P.3d 755 (Kan., 2002).

²³ See, for example, Seago v. Fellet, 676 P.2d 1224 (Colo., 1983) in which the court held that a subdivider could not escape liability for failure to pave a road as called for in contracts with subdivision lot owners because city drainage requirements made it more costly. The court concluded that "increased costs are not grounds for rescission of a contract" and also concluded that "the proper measure" of damages to a person injured by breach of contract for failure to construct offsite improvements is the diminution in value of the property purchased.

²⁴ Sec. 2. William Miller & Sec. 2. Will & Sec. 2. W

See, e.g. William Miller & Sons Co. v. Homeopathic Medical and Surgical Hospital, 90 Atl. 394 (Pa., 1914) in which a court held that an architect had a duty to make soil tests where the contract mentioned such tests.

²⁵ See Banner v. Town of Dayton, 474 P.2d 300 (Wyo., 1970) citing Processor, Law of Torts, p.464 (3rd ed). See also Seiler v. Levitz Furniture Co., Etc. 367 A.2d 999 (Del., 1976) in which the court endorsed the language of Bloomsburg Mills, Inc. v. Sordoni Construction Co., 164 A.2d 201 (Penn., 1960):

²⁶ Id. Banner v. Town of Dayton.

²⁷ City of Mounds View v. Walijari, 263 N.W.2d 420 (Minn., 1978). Sears, Roebuck \$ Co., v. Enco Associates, Inc., 372 N.E. 2d 555 (N.Y., 1977)

profession or trade is required to exercise the skill and knowledge normally possessed by members of that profession or trade in good standing in similar communities."²⁸

With regard to flood-related designs, the "community" of architects and engineers in which design professionals now typically carry out their practices is (arguably) a "national" one because of the widespread application of FEMA, Corps of Engineer and other standards throughout the nation. However, many states and communities have adopted more stringent flood mitigation standards then those of FEMA (e.g., freeboard on 100 year elevation requirements, zero rise floodway) and community standards in these locations may exceed those applied nationally. ²⁹

It should be noted that the FEMA standards are national minimums. FEMA encourages communities to adopt higher standards where appropriate and rewards them with Community Rating System insurance premium discounts. FEMA will also expect a community to enforce those higher standards if they are contained in its FEMA-approved ordinance.

Implied Warranty. With regard to the third type of standard, courts have, in general, not applied a doctrine of implied or strict warranty to service contracts. In the absence of any special agreement, an architect or engineer does not guarantee a perfect plan. Nor, in a majority of states, does liability ordinarily rest upon errors of judgment where care has been exercised. For example, the Minnesota Supreme Court³⁰ in a 1978 case refused to hold an architect liable for negligence and breach of warranty when damage occurred to a house he designed due to water seepage in the basement. The court held that there was no implied warranty of fitness for which the house was designed and the indeterminate nature of the architectural profession made it impossible to imply any warranty beyond a negligence standard.

But, courts in some states have held design professionals to a qualified warranty standard.³¹ In addition, courts have increasingly held **developers/sellers of new residences to a higher standard to buyers** upon a theory of implied warranty of suitability or habitability. See discussion below.³²

²⁸ Banner v. Town of Dayton, 474 P.2d 300 (Wyo., 1970), citing 2 ALI Restatement (Second) Torts, 2nd 229A.

²⁹ See note 11 above.

³⁰ City of Mounds View v. Walijari, 263 N.W.2d 420 (Minn. 1978).

³¹ Courts in a minority of states hold design professionals to a qualified warranty standard. See, for example, Bloomsburg Mills v. Sordoni Const. Co., 164 A.2d 201 (Pa., 1960) in which the court held that an architect was liable for the use of inadequate roof materials. The court held that "While an architect is not an absolute insurer of perfect plans, he is called upon to prepare plans and specifications which will give the structure so designed reasonable fitness for its intended use, and he impliedly warrants their sufficiency for that purpose."

³² See text and cases in footnotes 96-118 below.

Factors Relevant to the Standard of Care

Many more specific factors affect the standard of care which a design professional must exercise to comply with his or her design contract and to avoid negligence.

Knowledge of Flooding. In many instances the design professional is now expected to be aware of flood hazards and to reflect them in design if there are public flood maps for the area ³³ or other indications of possible flooding such as proximity to a watercourse or flood marks on trees and buildings. The Federal Emergency Management Agency, U.S. Army Corps of Engineers, state floodplain management agency and local governments have mapped major floodplain areas throughout the Nation. Local governments and state agencies have broadly adopted these maps as part of floodplain regulations. Design professionals are expected to familiarize themselves with all applicable regulations including regulatory maps.

The design contract will usually address what data are to be used as the basis of design. In general, the owner is required to supply to the design professional soils, flood, topographic and other data needed for design, although contract may also require the architect or engineer to do so. However, errors in owner-supplied flood and erosion data may not excuse the design professional entirely (particularly to third parties). The architect or engineer also has some responsibility for evaluating the sufficiency of data and may be held liable for uncritically using data that has a high likelihood of error.³⁴

Type of Activity and Degree of Risk. The standard of professional care required in a particular situation depends also upon the type of activity and the degree of risk it poses. For example, the standard of care for a high risk dam is different than the standard of care for floodproofing a home. The standard of care in designing a structure for low velocity and slow onset flooding along a lake in Wisconsin is different from the standard for high velocity and rapid onset, hurricane driven flood waters in Florida. In circumstances where the design of a dam or other structure could threaten lives or injury, design professionals need to be particularly careful.³⁵

Regulations. An architect or engineer is, in general, responsible for acquainting himself or herself with all applicable regulations. This means that the architect or engineer should investigate not only local zoning, subdivision control and building codes but applicable state and federal regulations (e.g., the Section 404 permitting program). Negligence may "arise from breach either of a common law duty or one imposed by statute or regulation since the conduct of a "reasonable man" may be prescribed by legislative enactment." In general, violation of a statute or ordinance creates, at a minimum, a presumption of negligence or evidence of negligence. ³⁷ For example, the Oregon Supreme Court ³⁸ held

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³³ See e.g., Seiler v. Levitz Furniture Co., Etc., 367 A.2d 999 (Del. 1976).

³⁴ Uhley v. Tapio Construction Co., Inc. 573 So.2d 390 (Fla. App. 4 Dist. 1991).

³⁵ See generally, Annot., Applicability of Rule of Strict or Absolute Liability to Overflow or Escape of Water Caused by Dam Failure, 51 A.L.R.3d 965 (1973).

³⁶ Hundt v. LaCross Grain Co., Ind., 425 N.E.2d 687 (Ind., 1981).

³⁷ See, e.g., Distad v. Cubin, 633 P.2d 167 (Wyo., 1981).

³⁸ Johnson v. Salem Title Co., 425 P.2d 519 (Ore., 1967).

an architect was liable for injury caused by a masonry wall that fell in a high wind although the negligent design had been done by a subcontracting engineer employed by the architect. The wall did not meet city building code specifications. The architect argued that he should not be held responsible for the negligence of an independent contractor but the court noted that the architect had assumed responsibility for overall design and that his responsibility to design the building in conformance with the building code was non-delegable.

In some contexts, courts give violation of an ordinance or other regulation great weight and consider it negligence per se if (1) the injury was caused by the ordinance violation, (2) the harm was of the type intended to be prevented by the ordinance, and (3) the injured party was one of the class meant to be protected by the ordinance.³⁹ Courts have, however, held that statutes and other regulations must establish specific standards of conduct if violation is to be considered negligence per se.⁴⁰ If the courts will not accept a negligence per se allegation, then the plaintiff must prove negligence or successfully allege some other cause of action to prevail.

"Custom". As discussed above, design professionals must comply with the minimum standards or customs of the community in which he or she practices. But, will compliance with applicable regulations and the "custom" of the design community protect an architect or engineer from liability? Compliance will certainly help protect a design professional from liability under the terms of a contract. It will also help protect the design professional against third party claims.

On the other hand, compliance with all regulations and adherence to the "customary" standards of engineering or architectural practice in a community is no guarantee that a design professional will not be held liable. This is particularly true where regulatory standards or practice in a community may be outdated. Reliance on industry "custom" or standards does not foreclose evaluation of whether reliance was reasonable under specific circumstances. Compliance with an ordinance or statute does not bar a negligence suit and "(u)nreasonable conduct is not an excuse when one merely complies with minimum regulatory requirements." As one court observed: ⁴² "The fact that many people engage in unreasonable behavior does not make the behavior reasonable." See more discussion below.

In addition, approval of a permit for a project by a state administrative agency does not preclude a private law suit. For example, an Iowa court⁴³ held that approval by a state agency of a stream channelization project did not preclude judicial relief to riparian landowners for damage due to the project.

³⁹ See Boyles v. Oklahoma Natural Gas Co., 619 P.2d 613 (Okl., 1980).

⁴⁰ See Shamnoski v. Pg Energy, 858 A.2d 589 (Pa., 2004)

⁴¹ See Corley v. Gene Allen Air Service, Inc., 425 So. 2d 781 (La., 1983).

⁴² See Griebler v. Doughboy Recreational, 466 N.W.2d 897 (Wis., 1991).

⁴³ See Oak Leaf Country Club, Inc., v. Wilson, 257 N.W.2d 739 (Ia., 1977).

Whether design professionals should consider ancillary factors to flooding such as erosion in their designs depends, in part, upon the hazards at a site, the custom within the profession and whether a reasonable expert would do so in the circumstances. Where erosion is a common and serious problem, design professionals need to consider it.⁴⁴

Magnitude of Flooding. How large a flood event must the design professional or landowner use as the basis for design? As suggested above, a design profession must, at a minimum, design for the flood specified in applicable floodplain regulations. This is, typically, the 100 year flood (at a minimum) for state or local floodplain regulations. However, some states and communities regulate to a higher standard (e.g., 500 year flood).

Only a few courts have addressed the appropriateness of using a particular magnitude or frequency of flood event for project design purposes. In one interesting case, an Arizona court⁴⁵ held that an engineer was liable to a landowner for damages where a bridge and approaches to the bridge he designed blocked the passage of a 100 year flood and caused ponding which destroyed the landowner's building. The court observed with regard to the negligence of the engineer to the landowner that "the question of whether this was a 25, 50 or 100 year flood is merely one fact to be considered by judge or jury on the question of foreseeability and negligence."

In a second case, a Kansas court ⁴⁶ held that both an consulting engineer and a county liable might be held liable for designing and constructing a bridge designed to "accommodate a 25-year flood and to raise the 100 year flood level upstream by no more than a foot" where inadequate consideration was given to downstream erosion. The issue here was not the reasonableness of the 25 year or 100 year flood levels per se but whether erosion should have been considered.

In a third case, a North Carolina court⁴⁷ held that a 100 year flood was foreseeable and that the state was not protected from a takings claim by an "act of God" defense for highway structures which periodically flooded private lands. The court held that "frequency of flooding sufficient to establish a taking generally will vary with the use to which the property is put". The court held that the flooding at from once in twenty-six years to once in every hundred years which occurred here constituted a taking of private property in the context of "high density urban residential property".

These cases suggest that the magnitude of the flood used for planning and management purposes depends in large measure upon the types of uses which could be affected by flooding and the degree and type of risks involved. For example, a Colorado court⁴⁸ held

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⁴⁴ See., e.g., Johnson v. Board of Pratt County Comm'rs, 897 P.2d 169 (Kan., 1995) in which engineers and the county were held liable for failing to consider erosion in design of a bridge. See also note 47 above.

⁴⁵ See L.H. Bell & Associates, Inc. v. Granger, 543 P.2d 428 (Ariz., 1975).

⁴⁶ See., e.g., Johnson v. Board of Pratt County Comm'rs, 897 P.2d 169 (Kan., 1995)

⁴⁷ See Lea Company v. North Carolina Board of Transportation, 304 S.E.2d 164 (N.C., 1983)

⁴⁸ Barr v. Game, Fish, and Parks, 497 P.2d 340 (Col., 1972);

that a state agency should have considered a "maximum probable" flood in constructing a dam. See discussion below.

Available Technologies and Risk. In general, courts have held that selection of materials and the use of specific technologies (e.g., pumps for a levee) are discretionary with the design professional. But, some courts have held that a very high level of technology must be applied when the risks are great and such technology is available even though the technology may not be generally applied in the profession or area. For example, a federal court in a famous case, The T.J. Hooper, ⁴⁹ held that the owner of a tug company was liable to the owner of two barges lost in a storm because it failed to equip its tug boats with radios (which would have provided timely warnings of the approaching storm) although such radios were not in 1928 a common practice on tugs. The court observed that the radios could have been provided at small cost and would have been of great value. The court further observed with regard to evidence of custom or usage that: "Indeed in most cases reasonable prudence is in fact common prudence; but strictly it is never its measure; a whole calling may have unduly lagged in the adoption of new and available devices...(T)here are precautions so imperative that even their universal disregard will not excuse their omission."

This case has been widely cited in the last seventy years as encouraging the standard of care to evolve as technology advances. One court stated, citing this case, that "(p)roper standards of practice in any profession...are conclusively fixed by local usage or general custom.....While in most instances, reasonable prudence is in fact common prudence, strictly it is never its measure." ⁵⁰ One court observed, citing this case, that: "While conformity with customary practice is evidence of reasonable care, however, it is not necessarily conclusive evidence." ⁵¹

Foreseeability of Harm; Act of God. Courts increasingly focus on the foreseeability of harm in deciding whether there has been negligence. A "reasonable man" (or a reasonable design professional) is ordinarily only responsible for injuries or damages which are known or could be reasonably foreseen. To constitute negligence, the act must be one which a reasonably careful person would foresee such an appreciable risk of harm to others as to cause him not to do the act or to do it in a more careful manner. The test is not only whether he or she did in fact foresee the harm but whether he or she should have foreseen it, given all the circumstances including the expertise of the design professional. For example, a flood plain regulatory map or adjacency to a water body will put an engineer or architect on notice that an area may be subject to flooding.

⁴⁹ See The T.J. Hooper, 60 F.2d 737 (2d Cir., 1932). See also Stewart v. State, 597 P.2d 101 (Wash., 1979); Riley v. Burlington Northern, Inc., 615 P.2d 516 (Wash., 1980) in which the Court held that the decision of Yakima County not to install a more sophisticated warning system than a non-mechanical railroad approach warning sign at a railroad crossing was nondiscretionary and subject to potential suit for negligence.

⁵⁰ Chiero v. Chicago Osteopathic Hospital, 392 N.E.2d 203 (Ill., 1979).

⁵¹ See Cherokee Ins. Co., v. E.W. Blanch Co. 66 F.3d 117 (6th Cir., 1995).

⁵² See Scully v. Middleton, 751 S.W.2d 5 (Ark., 1988).

There are, of course, limits to foreseeability. For example, design professionals may, in their contracts, provide that they are not responsible for "acts of God". They may also use "act of God" as a defense in some negligence suits. But, what is an "Act of God?"

An "Act of God" is such an unusual, extraordinary and unexpected manifestation of nature that it cannot be reasonably anticipated, guarded against, or resisted.⁵³ The following factors are relevant to establishment of the "act of God" defense to a negligence or breach of contract claim:⁵⁴

- -- the event was an act of nature, not man,
- -- the occurrence was sudden,
- -- the occurrence was unexpected,
- --no forecast or warning was made with regard to the time, nature, or severity of the occurrence,
- -- the occurrence was unprecedented, and
- --the occurrence, if not unprecedented, was of an unusual or extraordinary nature.

In recent years, courts have limited the act of God defense, particularly for high-risk activities. For example, a Colorado court held that the state of Colorado could not successfully use the act of God defense when a dam designed for a maximum probable flood failed because the court believed that the event which did occur was foreseeable.⁵⁵ The court stated:

The maximum probable storm, by definition, is both maximum and *probable*. It can and may occur. Dr. Clark further testified that in his opinion a reasonably competent meteorologist or hydrometeorologist should have anticipated a flood of the magnitude of the June 1965 flood in Clay Creek Basin.

On this evidence, the court found that with modern meteorological techniques, a maximum probable storm is predictable and maximum probable flood is foreseeable. Thus being both predictable and foreseeable to the defendant in the design and construction of the dam, the defense of act of God is not available to them. In short, the flood which occurred in June of 1965 could not be classified as an act of God.

Widespread availability of flood maps and flood predictions reduce the situations in which the act of God defense may succeed since even very infrequent events area are now "expected" albeit infrequently. Courts have increasingly been unwilling to allow

⁵³ See, generally Wheatland Irrigation District v. McGuire, 537 P.2d 1128 (Wyo., 1975); Lee v. Mobil Oil Corporation, 452 P.2d 857 (Kan., 1969)

⁵⁴ See generally Allen v. Simon, 888 So.2d 1140 (La. 2004) and In Re Flood Litigation, 607 S.E.2d 863 for discussions of the "Act of God" defense including many cases. See also cases cited in note 53 above and 55 below. See 1 Am Jur.2d "Act of God" p.897 (2005).

⁵⁵ Barr v. Game, Fish, and Parks, 497 P.2d 340 (Col., 1972); See also Laukkanen v. Jewel Co., 222 N.E. 2d 584 (Ill., 1966) in which the court refused to allow an "Act of God" defense for high winds.

design professionals to escape liability by claiming flood problems could not be anticipated. ⁵⁶

PART 3: LIABILITY OF DESIGN PROFESSIONAL TO 3RD PARTIES

Is a design professional liable to third parties for flooding or erosion damage to upstream, adjacent, or downstream properties or individuals? Is he or she liable to contractors?

The Privity Requirement

At common law, a design professional was not liable to a third party such as a downstream landowner or a contractor for flood damages because there was no "privity" (direct relationship) between the professional and the third party. But, increasingly, courts have held design professionals liable for inadequate plans which result in flood losses to others. Courts may hold them negligent even if there is no "privity" (direct relationship) between the design professional and the injured party.⁵⁷ Contract clauses relieving design professionals of liability to clients do not relieve professionals of liability to third parties.

Courts have long held that an engineer may be liable to downstream landowners when a dam breaks or is negligently operated.⁵⁸ A design professional owes a duty to the public to exercise care with an inherently dangerous project or activity. The law of negligence has also evolved to the point where, in most states, it recognizes a duty upon an architect or engineer to exercise care with any project (not just ultra-hazardous ones) where there is foreseeability and reasonable certainty that others may be injured by failure to use care. ⁵⁹ A design profession is expected to prepare designs which will not threaten other landowners or the public.

Courts have often found architects or engineers liable without privity under negligence or other theories for plans that increase flood damages on a construction site or other lands. For example:

--The North Dakota Supreme Court⁶⁰ held an architect-engineer liable without privity for damage caused by increased drainage of surface water onto adjacent lands by a trailer

⁵⁶ See, e.g., Hoge v. Burleigh Cty. Water Management Dist., 311 N.W.2d 23 (N.D., 1981) in which the court held that the "act of God" was not the sole proximate cause of flood damages. See also Johnson v. Salem Title Co., 425 P.2d 519 (Ore., 1967). See Edward Thomas, Liability for Water Control Structures Failure Due to Flooding, Ed Thomas, Esq. at http://www.floods.org/PDF/NAI Liability Failure Facilities 0906.pdf

⁵⁷ See generally Seiler v. Levitz Furniture Co., Etc. 367 A.2d 999 (Del., 1976); Laukkanen v. Jewel Co., 222 N.E. 2d 584 (Ill., 1966).

⁵⁸ See generally Skhamnoski v. PG Energy, 858 A.2d 489 (Pa. 2004); Ed Thomas et. al.: http://www.floods.org/PDF/NAI Liability Failure Facilities 0906.pdf.

⁵⁹ See generally, Jones v. Boeing Co., 153 N.W.2d 897 (N.D., 1967) in which the court observed that "The duty was upon the architect-engineer to exercise ordinary care for the protection of any person who foreseeably and with reasonable certainty may be injured by the failure to do so." See also cases cited in notes 60-62 below.

⁶⁰ See, e.g., Jones v. Boeing Co., 153 N.W.2d 897 (N.D., 1967).

park when he planned and designed the park and supervised construction. The court applied the rule of reasonable use to surface waters and sustained the finding of a jury that the architect-engineer did not exercise ordinary care. He had also been warned by the adjacent landowners of possible problems.

- --The Georgia Supreme Court⁶¹ held an architect liable for preparing plans for a church, roadways and parking lot which increased flooding on adjacent land, despite the lack of privity between the architect and adjacent landowner.
- --A federal district court⁶² in Mississippi similarly held that an architect could be liable to a general contractor for inadequate drainage plans and specifications that resulted in flooding of the construction site and damage to the contractor despite lack of privity between the architect and contractor.

The design professional is not liable, however, in all circumstances for increased flood damages to third parties. The architect/engineer is only, in most circumstances, responsible for an "unreasonable" design which results in damage and may have defenses such as statute of limitations, act of God or contributory negligence.

Where the design professional's contract with a client calls for supervision as well as design, he or she must also use reasonable care in supervising the contractor or contractors with regard to adherence to design, construction materials and methods. ⁶³

PART 4: LIABILITY OF A LANDOWNER/DEVELOPER WHO BLOCKS FLOOD FLOWS OR INCREASES RUNOFF

As indicated above, this paper focuses upon the liability of design professionals. However, we will briefly examine the liability of landowners and developers because individuals damaged by flooding often sue both landowners/developers and design professionals. In addition, if the landowners/developers are successfully sued they quite often, in turn, sue their design professionals.

As discussed in a companion paper, landowners and developers are generally liable for **increasing** flood or erosion damages on other lands due to filling, grading, channelization, ditching, construction of houses, construction of bridges, construction of roads and parking lots and other structures and activities.⁶⁴ The damaged individual may sue private landowners, developers, builders, or government landowners causing such

⁶¹ Bodin v. Gill, 117 S.E.2d 325 (Ga., 1960).

⁶² Owen v. Dodd, 431 F.Supp 1239 (D.C. Miss, 1977).

⁶³ See, e.g., Lee County v. Southern Water Contractors, Inc., 298 So.2d 518 (Fla., 1974).

⁶⁴.See, e.g., Bahman v. Estes Homes, 710 P.2d 1087 (Ariz., 1985). See more generally many cases cited in Jon Kusler and Edward Thomas, No Adverse Impact Floodplain Management and The Courts. Association of State Floodplain Managers, Inc. (2005).

http://www.floods.org/NoAdverseImpact/NAI_Legal_Paper_102805.pdf

damage based upon a variety of legal theories. ⁶⁵ But, a landowner is not liable for offsite flooding caused by **natural causes** such as beavers ⁶⁶ or the growth of Salt Cedar or other natural growth in floodplains or river channels. ⁶⁷ Landowners are liable for increasing the location, depth, velocity, and duration of flooding in both watercourses and other bodies of water including diffused surface water in most jurisdictions ⁶⁸. The "common enemy" doctrine continues to be applied to surface waters in some states. ⁶⁹

In most jurisdictions at common law, landowners are also strictly liable for failure of a dam even without negligence because dams are considered ultra-hazardous activities. Many states have also adopted statutes requiring state permits for dams and some have also imposed statutory liability upon landowners for flooding due to the construction, operation and maintenance of dams. 71

In short, a landowner undertaking modification of a natural watercourse or surface water runoff which may increase flood heights, velocities, duration or location on another property does so at his or her peril. This also applies to the design professional that the landowner hires.

PART 5: THE LIABILITY OF CONTRACTORS

Is a contractor (in contrast with a design professional) responsible for flood damages to a structure constructed by the contractor? For flood damages to adjacent lands?

The responsibility of a contractor to his or her client, much like the responsibility of the design professional, depends in large measure on the terms of the contract, but a contractor may also be held liable to the client or other landowners for negligence. A contractor who enters into a contract for construction in accordance with plans and specifications furnished by the owner is not held by courts to warrant the sufficiency of the plans and specifications in avoiding flood damages, and the contractor's principal

⁶⁵ These include negligence, trespass, nuisance, riparian and surface water law, strict liability, and taking of private property without payment of just compensation (applies to governmental units only). See cases cited in Jon Kusler and Edward Thomas, note 64 above.

⁶⁶ See Bracey v. King, 406 S.E.2d 265 (Ga., 1991); Bransford v. International Paper, 750 So.2d 424 (La., 2000).

⁶⁷ See, e.g., Beals v. State, 721 P.2d 1154 (Ariz., 1986)

⁶⁸ See, e.g., Arreola v. Monterey County, 122 Cal. Rptr.2d 38 (Calif., 2002) in which the court observed that "Under ordinary rules applicable to riparian landowners, both upper and lower riparian landowners have a duty to avoid altering the natural system of drainage in any way that would increase the burden on the other. ..Traditionally, a lower landowner that obstructs a natural watercourse is liable for damages that result form the obstruction....The rule applied even if the damaging flow in the obstructed watercourse is seasonal flood water." See also Templeton v. Huss, 311 N.E. 2d 141 (Ill., 1974); County of Clark v. Powers, 611 P.2d 1072 (Nev., 1980).

⁶⁹ See, e.g., White v. Pima County, 775 P.2d 1154 (Ariz., 1989). However, see Heins Implement v. Hwy. & Transp. Com'n, 859 S.W.2d 681 (Mo., 1993) overruling the common enemy doctrine in Missouri and adopting a "reasonable use" rule.

⁷⁰ See Prosser, Handbook of the Law of Torts 505 (971); "Dam Failure: Applicability of Rule of Strict Liability to Overflow or Escape of Water Caused by Dam Failure" 51 ALR3d 965 (1973)

⁷¹ See Binder, "Dam Safety: The Critical Imperative," 14 Land and Water Law Review 341 (1979).

obligation to the client is to perform in accordance with those plans and specifications.⁷² Pursuant to many construction contracts, the contractor is not responsible to his/her client for damages such as flood damages that result from inaccurate data or specifications provided by the client. However, a Florida court⁷³ held that a contractor which constructed a house based upon "assumed" or "assigned" flood elevations which were incorrect was sufficiently put on notice "that he must make an independent determination of the correct elevations" and that "(h)is failure to do so will result in liability to the owner for any defects in the structure upon completion."

The contractor may also be responsible for design errors if he or she is a designercontractor and many designers now also serve as contractors. A contractor is also liable to third parties for damages on adjacent lands⁷⁴ caused by the contractor's own negligence while the project is underway and may continue after the client has accepted the project such as placement of fill in a stream, incorrect location of a levee, or grading which changes the point of discharge of a watercourse. 75 For example, both the architect and the contractor were held liable by an Iowa court for flood, drainage, and sediment damages to a landowner adjacent to a school construction project. ⁷⁶ Punitive damages were awarded against the contractor.

There is also always the possibility that a flood event will occur while construction is underway. Who will bear the damages from a natural event while a project is in progress is usually addressed in the construction contract. Construction contracts often provide that the contractor is not responsible for damage or destruction caused by flooding, high winds, erosion, and other natural hazards during construction. In the event that such risks are not covered by the contract, the risk of impracticality or impossibility are born by the contractor. 77 Under contracts for repair or remodeling of existing buildings, the contractor's duty to repair is usually discharged when the work is completed and it is later destroyed by a flood as long the contractor is not to blame for the mishap. 78 But, this depends upon the terms of the contract.

⁷² See, United States v. Spearin, 248 U.S. 132 (S.Ct., 1918); Commonwealth of Pennsylvania v. Osage Co., 355 A.2d 845 (Penn., 1976).

⁷³ Uhley v. Tapio Construction Co., Inc., 573 So.2d 390 (Fla., 1991).

⁷⁴ See, e.g.,McCarthy v. J.P. Cullen & Son Corp., 199 N.W.2d 362 (Ia., 1972).

Many courts have rejected the common law doctrine that the liability of a contractor ends with the completion and acceptance of construction. See, e.g., Davis v. Baugh Indus. Contractors, 150 P.3d 545 (Wash., 2007). See also, Emmanuel Tipon, Annot., Modern Status of Rules Regarding Tort Liability of Building or Construction Contractor for Injury or Damage to Third Person Occurring After Completion and Acceptance of Work; "Completed and Accepted? Rule, 74 A.L.R.5th 523 (1999).

⁷⁶ See, e.g., McCarthy v. J.P. Cullen & Son Corp., 199 N.W.2d 362 (Ia., 1972).

⁷⁷ See, e.g., Caron v. Andrew, 284 P.2d 544 (Calif., 1955) in which the court quoted, with approval: (W)here a party has agreed, without qualification, to perform an act which is not in its nature impossible of performance, he is not excused by the difficulty of performance, or by the fact that he himself becomes unable to perform. The impossibility which will excuse the performance of a contract must consist in the nature of the things to be done and not in the inability of the obligor to

See also F.J. Busse, Inc. v. Department of Gen. Services, 408 A.2d 578 (Penn., 1979). Tripp et. al. v. Henderson, 28 So.2d 857 (Fla., 1947).

On the other hand, a unqualified performance obligation to construct or repair a structure consistent with plans is not relieved by flooding or other natural hazards in the absence of a contract clause relieving the contractor from the obligation. The contractor may be responsible for completing a project at the original contract price even if it is damaged or destroyed by flood hazards. It all depends upon the contract. For example, the Arkansas Supreme Court held that a contractor was liable for completion of a golf course at a fixed contract amount after a torrential rain of 12 inches in 10 hours caused \$60,000 in damage. Courts are especially likely to hold a contractor to a fixed price where there is common knowledge that the lands are subject to flooding and the contractor is assumed to consider the risk. For example, a contractor was denied additional costs where a severe flood deposited debris in area which the contractor had agreed to clear for a fixed price. Public flood records were available for the area.

Some courts have held that private contractors who contract with governments may be entitled to common law and statutory immunity from liability analogous to government immunity if ⁸³ "(1) the governmental authority approved reasonably precise specifications; (2) the contractor's actions conformed to those specifications; and (3) the contractor warned the supervising governmental authority about the possible dangers associated with those specifications that were known to the contractor but not to the governmental officials."

If a contractor's losses can be traced to inadequate architectural plans the contractor may be able to bring action against the architect. ⁸⁴ Courts have increasingly rejected the contention that privity of contract between the architect and contractor is necessary. ⁸⁵

PART 6: LIABILITY OF SUBDIVIDERS AND BUILDERS FOR SUBSEQUENT FLOOD DAMAGES; IMPLIED WARRANTY

Fraud and Intentional Misrepresentation

At common law, sellers of land or buildings had no duty to investigate or disclose flood or other hazards to buyers, but they could not lie about known hazards or intentionally mislead purchasers. ⁸⁶ The doctrine of "caveat emptor" (let the buyer beware) prevailed. However, sellers could be sued for fraud or intentional misrepresentation if they knowingly made untrue statements or withheld information and the buyer relied upon the

⁷⁹ See cases cited in note 77 above and 80-82 below.

⁸⁰ Pete Smith Co., Inc. City of El Dorado, 529 S.W.2d 147 (Ark., 1975)

⁸¹ Caron v. Andrew, 284 P.2d 544 (Cal., 1955).

⁸² Carman v. United States, 166 F. Supp. 759 (Cl.Ct., 1958).

⁸³ Lyons v. CAN Ins. Comp. 558 N.W.2d 658 (Wis., 1996).

⁸⁴ See Bilt-Rite v. The Architectural Studio, 866 A.2d 270 (Penn., 2005) and many cases cited therein.

⁸⁵ Id., See also Nota Construction Corp. v. Keyes Associates, 694 N.E.2d 401 (Mass., 1998); Donnelly Construction Co. v. Oberg/Hunt/Gilleland, 677 P.2d 1292 (Ariz., 1984); Annot. Tort Liability of Project Architect for Economic Damages Suffered by Contractor, 65 A.L.R.3d 249-295.

⁸⁶ See Annot., "Vendor's Concealment of Flooding Danger", 90 A.L.R.3rd 568 (1979). See, e.g., Betlhalahmy v. Bechtel, 415 P.2d 698 (Id., 1966). See also Gennari v. Weichert Co. Realtors, 691 A.2d 350 (N.J., 1997)

statements or information.⁸⁷ For example, one court ⁸⁸ held that a seller was responsible for water problems in a house by stating to a buyer that water came from washtubs rather than leakage. Similarly, another court⁸⁹ held that a claim for fraud and negligent misrepresentation could go to trial where (allegedly) seller provided buyer with a fact sheet and survey indicating land was not located in a hazardous area and indicated to buyer, when asked, that flooding had not been a problem. When Hurricane Floyd hit the coast in 1999 the buyer's home, outbuildings and personal property were extensively damaged. The plaintiffs sued, contending they had relied on the sellers misrepresentations in purchasing the property.

Withholding Information

Courts have also held that builders and other sellers have a duty to disclose to home buyers information concerning flood or drainage problems if the builders have made an effort to investigate suspected flood problems and learned of problems. ⁹⁰ A Colorado District court ⁹¹ held that sellers of property who knew that at least a portion of the property was in the floodplain were potentially liable to buyers for fraudulent concealment despite an "as is" clause in the sales contract. As discussed below, many states have also adopted site-specific hazard disclosure laws that require notification of buyers of flood hazards.

Mutual Mistake

At common law, flooding was, in some instances, grounds for rescission (cancellation) of a land sales contract based upon the theory of mutual mistake. For example the Kansas Supreme Court allowed rescission of a real estate transaction for a floodplain parcel on the ground of mutual mistake. The buyer had agreed to buy the lot for residential use. When he contacted the zoning official, he discovered that floodplain zoning prohibited construction over one half of the lot which was in a floodway and required fill and no basements for a structure on the other half. This, the court held, was sufficient ground for a rescission.

⁸⁷ See, for example, generally Gennari v. Weichert Co. Realtors, 691 A.2d 350 (N.J., 1997).

⁸⁸ Palmersheim v. Gates, 191 N.W. 567 (Wis., 1923).

⁸⁹ See Kampschroeder v. Bruce, 590 S.E.2d 333 (N.C., 2004). This was an unpublished decision.

⁹⁰ Kemper v. Don Coleman, 746 So.2d 11 (La., 2000). The court noted (quoting another case) that "Modern law, therefore, imposes a duty to speak whenever justice, equity, and fair dealing demand it."

See Haney v. Castle Meadows, Inc., 839 F.Supp. 753 (D. Colo., 1993) in which the court observed that "While the parties can contractually alter the allocation of risk as to defects of which neither party has knowledge, a seller who actually knows there is a latent defect on the property and choses not to reveal this to the purchaser cannot hade behind the contract language purporting to shift the risk of nondisclosure to the purchaser."

⁹² A valid real estate contract, like other contracts, requires a "meeting of minds". Courts have reasoned that there was no meeting of minds when the parties to a contract are mistaken with regard to physical conditions such as flooding which may thwart the intended use of a property. See notes 98-100 below.

⁹³ Garrison v. Berryman, 594 P.2d 159 (Kan., 1979).

Courts have recognized that land sales contracts are also subject to rescission for material misrepresentations whether fraudulent or innocent. ⁹⁴ However, some courts have refused to rescind sales contracts based upon some flooding, particularly where flood hazards are common and the flooding is infrequent. ⁹⁵

Implied Warranties

Courts have, with increased frequency, been willing to hold sellers of flood prone properties and, particularly, residential structures liable for subsequent damages, reflecting the overall trend toward holding sellers liable for flaws in all sorts of products. Some states and local governments have adopted statutes and ordinances requiring that subdividers or builders investigate and divulge information concerning soil or flood hazards. Other states have adopted consumer protection and fair trade practices acts which require full disclosure of hazards and other defects in various products and services including new homes. 98

In most states, courts have modified common law caveat emptor rules to make subdividers and sellers responsible to buyers for flood and other problems in new residences under theories of implied warranty of "suitability" or "habitability". ⁹⁹ This is a major and relatively recent change in the law.

Courts have applied the doctrine of implied warranty of suitability or habitability almost exclusively to builders of new residences or condominiums. The implied warranty of suitability or habitability has been interpreted to include workman-like construction, compliance with code, and habitability.

Examples of implied warranty of habitability or suitability cases include:

⁹⁴ See Osbourne v. Cal-Am Financial Corp. 145 Cal. Rptr. 584 (Cal., 1978); Haney v. Castle Meadows, Inc., 839 F.Supp. 753 (Colo., 1993) (Recission for the purposes of calculating damages.).

⁹⁵ See, e.g., Smith v. Kennedy, 392 So.2d 177 (La., 1980) in which the court held that flooding by a 75 year flood event was not a "redhibitory" defect. See also Napoli v. Gully, 509 So.2d 79 (La. 1987) in which the court held that the fact that a house might flood "once in 100 years" was not a redhibitory defect.

⁹⁶ See Redarowicz v. Ohlendorf, 441 N.E.2d 324 (Ill., 1982); Shisler v. Craig Frank d/b/a CF Builders, Wisconsin Court of Appeals, No. 97-2311 (Wis. 1998)

⁹⁷ See, e.g., Calif. Civil Code Section 1002.6c which requires sellers to give prospective buyers a Natural Hazard Disclosure statement if a residential property lies within one or more of six types of hazard areas including special flood hazard, dam failure, earthquake, seismic, wild fire, and high risk fire. Civil Code Section 1002.6c, prescribes the contents of the Natural Hazard Disclosure Statement. See http://www.ceres.ca.gov/planning/nhd/showtell.html.

⁹⁸ See, e.g., See Moore v. Bird Engineering Co., 41 P.3d 755 (Kan., 2002) interpreting K.S.A. 50-623 et. seq, Gennari v. Weichert Co. Realtors, 691 A.2d 350 (N.J., 1997) interpreting N.J.S.A. 56:8-1 to 20. Several states have adopted statutes which afford buyers a legal remedy for construction defects in new homes. See Annot., "Validity, Construction, and Application of New Home Warranty Acts, 101 ALR5th 447 (2002).

⁹⁹ See Smith v. Miller Builders, Inc., 741 N.E.2d 731 (Ind., 2000). See also ABC Builders, Inc. v. Phillips, 632 P.2d 925 (Wyo., 1981) For a good overall summary of cases see Shisler v. Craig Frank d/b/a CF Builders, Wisconsin Court of Appeals, No. 97-2311 (Wis. 1998) (Unpublished). See also Redarowicz v. Ohlendorf, 441 N.E.2d 324 (Ill., 1982) and the cases from twenty four states cited therein.

--The Maine Supreme Court¹⁰⁰ held that a builder-vendor was liable on a theory of "implied theory of habitability" where 8 to 10 feet of water periodically flooded the basement of a house intended to be used for a variety of family purposes. The court rejected that claim that the defect could be remedied by a \$500 sump pump and awarded \$12,500 in damages—the cost of disconnecting the house from its foundation, filling the basement, and pouring a new floor.

--The Wyoming Supreme Court¹⁰¹ held that a developer- builder- vendor was liable to subsequent purchasers for negligence in failing to select a safe building site for a residence. The house was located at the toe of a hill. The house was subject to flooding and landslide after heavy rains. This ultimately resulted in destruction of the house.

As noted above, courts have primarily applied the doctrine of implied warranty of suitability to commercial builders of residences and condominiums. However, some courts have held subdividers/ sellers liable for flooding and drainage problems on undeveloped lots in a subdivision where the seller had undertaken improvements for the lots. A Nevada court held that the developer of lots in the Lake Tahoe basin had failed to warn buyers of the risk of being located in the floodplain of a mountain stream although they knew buyers planned to build there. The developer was negligent when the home that was built was destroyed by a flow of water carrying trees, mud, and other debris. A Colorado court held a commercial developer/sellers potentially liable for a flood prone parcel which "was extensively modified in order to be sold as a residential parcel." An Oregon court held that a real estate developer of ocean front lots subject to erosion was potentially liable for failing to perform tests to determine the degree of erosion at a site before selling lots.

A builder constructing a house according to plans and specifications selected by a landowner with good workmanship and materials on a lot provided by the landowner is not, however, liable for subsequent flooding of the lot and damages to the house because the problem is with the lot and not the house. ¹⁰⁶

Some courts have applied the implied warranty of habitability to residential leases as well as the sale of buildings. 107

¹⁰⁰ Banville v. Huckins, 407 A.2d 294 (Me., 1979).

¹⁰¹ ABC Builders, Inc. v. Phillips, 632 P.2d 925 (Wyo., 1981).

¹⁰² See generally ABC Builders, Inc. v. Phillips, 632 P.2d 925 (Wyo., 1981) in which the court stated that "Providing a safe site goes like hand and glove with construction." See also cases cited therein. See Smith v. Miller Builders, Inc. 741 N.E.2d 731 (Ind., 2000); Jordan v. Talaga, 532 N.E.2d 1174 (Ind., 1989); Hinson v. Jefferson, 215 S.E.2d 102 (N.C., 1975); Rush v. Lincoln-Devore Testing Laboratory, Inc, 698 P.2d 832 (Colo., 1985).

¹⁰³ Village Development Co. v. Filice, 526 P.2d 83 (Nev., 1974).

¹⁰⁴ See Rusch v. Lincoln-Devore Testing Laboratory, Inc., 698 P.2d 832 (Colo., 1985).

¹⁰⁵ Beri, Inc. v. Salisham Properties, Inc. 580 P.2d 173 (La. 1977).

¹⁰⁶ See Burger v. Hector, 278 So.2d 636 (Fla., 1973).

¹⁰⁷ See Pines v. Perssion, 111N.W.2d 409 (Wisc., 1961); Schipper v. Levitt & Sons, Inc. 207 A.2d 314, 317 (1965).

Application of the doctrine of implied warranty of suitability or habitability was originally available only to the original purchaser of a house. In such situations there is a contract relationship between the purchaser and the builder/seller. But a growing number of courts have expanded the warranty to subsequent purchasers where there is no privity of contract. ¹⁰⁸ However, some courts continue to require privity. ¹⁰⁹

To collect on a breach of warranty claim, buyers must at least inform the builder of the problem and give him or her an opportunity to cure it. Some courts recognize that implied warranty of habitability and fitness is breached if homeowner proves even minor construction defect and temporary injury. Implied warranty of fitness for habitation also does not require that a dwelling be rendered totally uninhabitable before there is a breach of warranty. It

Remedies for Breach of Implied Warranty

Buyers may have a number of remedies for the breach of an implied warranty of suitability or habitability.

First, they may "rescind" the contract and ask for restitution ¹¹³ for major defects not readily remediable.

Second, they may claim for damages for defects susceptible of remedy. Damages may be calculated in several ways. The cost of repair is the most common measure. But, the value of the property before and after the injury may also be used. There are other methods as well. If repair is not practical, the builder is required to pay damages restoring the injured party to the condition he or she would have been in if the residence been properly constructed or located outside of a flood area. A Louisiana court warded a buyer of a house in a flood hazard area \$4,730 in damages when the seller failed to disclose flood hazards. The court awarded the difference between the purchase price and the actual value of the house subject to flooding. Flood damages had occurred since the house was purchased but these had been compensated by flood insurance.

 ¹⁰⁸ See Smith v. Miller Builders, Inc., 741 N.E.2d 731 (Ind., 2000); McMillan v. Brune-Harpenau-Torbeck Builders, Inc., 455 N.E.2d 1276 (Ohio, 1983); Richards v. Powercraft Homes, Inc., 678 P.2d 427 (Ariz., 1984); Keyes v. Guy Bailey Homes, Inc. 439 So.2d 670 (Miss., 1983) and many cases cited therein.
 ¹⁰⁹ See, eg., Tereault v. Palmer, 413 N.W.2d 283 (Minn., 1987); Dunant v. Wilmock, Inc., 335 S.E.2d 162 (Ga., 1985). For discussion of the "economic loss" rule which has been adopted by some states see, e.g., Moorman Mfg. Co. v. National Tank Co., 435 N.E.2d 443 (Ill., 1982). This rule, which is based upon contract concepts, requires privity for recovery of purely economic losses.

¹¹⁰ See, e.g., Jordan v. Talaga, 532 N.E.2d 1174 (Ind., 1989).

¹¹¹ See, e.g., Deisch v. Jay, 790 P.2d 1273 (Wyo., 1990).

¹¹² See, Rogers v. Lewton, 570 N.E.2d 133 (Ind., 1991).

¹¹³ See Deisch v. Jay, 790 P.2d 1273 (Wyo., 1990). For rescission as a remedy see also cases cited in notes 92-95 above.

¹¹⁴ See, e.g., Sanford v. Kobey Bros. Constr. Corp., 689 P.2d 724 (Col., 1984); Lochrane Eng. V. Willingham Realgrowth, 552 So.2d 228 (Fla. 1989).

¹¹⁵ James D. Davis v. Homer Wesley Davis, 353 So.2d 1060 (La., 1978); See also D'Angelo v. Poche, 434 So.2d 120 (La., 1083).

Primary defenses against claims of fraud, negligent representation, or implied warranty include constructive notice of flood problems in the chain of title, 116 statutes of limitation or "repose" which begin to run from the date of alleged wrongdoing or injury, and express disclaimers of liability in sales contracts. Statutes of limitation or repose are an increasingly common defense because most states have adopted relatively short time periods for bringing an action. This time period is measured from the time a structure is completed until a suit is filed in court. For example, a Mississippi court applied a six year statute of repose to deny a negligence claim for water damage to a homeowner against a builder. 118

PART 7: LIABILITY OF REAL ESTATE BROKERS, BANKS, INSURANCE AGENTS

Real Estate Brokers

Buyers of flood-prone properties have also successfully sued real estate brokers in some instances for failing to divulge known flood hazards. Real estate brokers have been held by courts to an increasingly high standard of care in their relationship with buyers. This relationship has been characterized as "fiduciary" relationship by some courts. For example, a Louisiana Court concluded: 121

A real estate broker is a professional who holds himself out as trained and experience to render a specialized service in real estate transactions. The broker stands in a fiduciary relationship to his client and is bound to exercise reasonable care, skill, and diligence in performance of his duties....Ultimately the precise duties of a real estate broker must be determined by an examination of the nature of the task the real estate agent undertakes to perform and the agreements he makes with the involved parties....The failure to disclose to a buyer a known material defect regarding the condition of real estate of which the broker or salesperson has knowledge is among a broker's duties....

Other courts have held brokers liable for failing to disclose flood or drainage problems without characterizing the relationship as fiduciary. For example, an Arkansas Court of

Realtors, just like doctors, lawyers, engineering consultants, and builders, hold themselves out as professionals; it is their job to know their profession. People rely on and trust them. Failure to comply with either the accepted standards in the field or the standards society is willing to recognize as acceptable, is actionable.

¹¹⁶ See Lopresti v. Burry, 612 S.E.2d 730 (S.C., 2005) in which the court held that a buyer had constructive notice of a flood easement in the lot's chain of title.

¹¹⁷ See, e.g., Keyes v. Guy Bailey Homes, Inc. 439 So.2d 670 (Miss., 1983). See also footnote 169.

¹¹⁸ Baldwin v. Holliman, 913 So.2d 400 (Miss., 2005).

¹¹⁹ See, e.g., Gennari v. Weichert Co. Realtors, 691 A.2d 350 (N.J., 1997).

¹²⁰ See Hulse v. BHJ, Inc. 71 P.3d 262 (Wyo., 2003) and discussion therein. The court in this case quoted from one of its earlier cases:

¹²¹ Hughes v. Goodreau, 836 So.2d 649 (La., 2002).

Appeals¹²² upheld a judgment of damages against a seller, his insurance agency and others for failing to inform purchasers that the house was in a flood zone and that flood insurance could be purchased. However, the court limited damages to those recoverable under an ordinary flood insurance policy.

On the other hand, courts have also held that buyers need to inspect property and failure to inspect may defeat a claim of negligent misrepresentation. ¹²³ A North Carolina court ¹²⁴ also held that a real estate broker did not owe buyers a duty to check federal flood hazard maps to determine whether property was located in the floodplain and buyer where the broker made no representations, the buyers had an independent survey done for the property and the fact that the property was in the floodplain was of public record.

Banks

Banks have no common law duty to provide flood information to individuals seeking loans. 125 However buyers of flood-prone properties seeking mortgages have sued banks for failing to correctly inform them that properties are subject to flooding as called for by the National Flood Insurance Act (42 U.S.C. 4012 (a), (b)) and to require flood insurance. Courts have broadly, but not universally, held that the federal flood hazard disclosure requirements of the National Flood Insurance Act create no legal duty on behalf of banks to provide correct flood information to individuals seeking mortgages and the failure to provide correct information does not result in bank liability or the liability of businesses which provide flood hazard information to banks. ¹²⁶ Courts have. in general, reasoned that the beneficiaries of flood hazard notice requirements are the banks, not individuals seeking loans, and the federal statute creates no duty to mortgagees

¹²² Robbins v. Marchant, 616 S.W.2d 736 (Ark., 1981). See also Hulse, note 120 above, in which the court held real estate brokers to a high standard of care but did not characterize the relationship as "fiduciary". ¹²³ See., e.g., Hearne v. Statesville Lodge No. 687, 546 S.E.2d 414 (N.C., 2001) in which the court held that a realtor was not responsible for a buyers failure to inspect a septic tank system when the purchase contract addressed that right and the buyers had full opportunity to inspect. On the other hand see Gennari v. Weichert Co. Realtors, 691 A.2d 350 (N.J., 1997) in which the realter and builder were held liable under a Consumer Fraud Act despite independent investigations and buyer inquiries.

¹²⁴ See Clouse v. Gordon, 445 S.E.2d 428 (N.C., 1994). ¹²⁵ See, e.g., Laurent v. Flood Data Serv. Inc., 766 N.E.2d 221 (Oh., 2001) and many cases sited therein. See Callahan v. Country Wide Loans, Inc. No. 3:06CV105/RV/MD (D., Fla., 2006) in which the court refused to hold Countrywide Home Loans, Inc., a lending institution, liable under theories of negligence and negligent misrepresentation for incorrectly concluding that a property was not in a flood hazard area when it was. The court held that violation of a federal statute was "evidence of negligence" but that the NFIA had been adopted to protect a particular class of people (lenders, borrowers) from a particular class of injury and not mortgagees. The court also held that recognizing a duty on behalf of the lending institution would raise "federalism" concerns. See also Ford v. First American Flood Data Services, Inc., 1:06CV00453 (D., N.C.2006) which denied liability for a company providing flood determinations for borrowers. See also Mid-America National Bank v. Savings & Loan Association, 737 F.2d 638 (7th Cir., 1984); Hofbauer v. Northwestern National Bank, 700 F.2d 1197 (8th Cir., 1983); Arvai v. First Federal Saving and Loan Association, 698 F.2d 683 (4th Cir., 1983); Till v. Unifirst Federal Savings and Loan Association, 653 F.2d 152 (5th Cir., 1981); Jack v. City of Wichita, 933 P.2d 787 (Kan., 1987); Lehman v. Arnold, 484 N.E.2d 473 (Ill., 1985). ¹²⁶ Id.

on behalf of the banks. However, the Supreme Court of Connecticut¹²⁷ held that a bank was liable pursuant to a state common law negligence action for failing to notify the purchaser of a house that the house was in a special flood hazard area. This court found that the federal statute and regulations promulgated under it created a statutory standard of conduct the breach of which would give rise to an action for common law negligence. The court concluded that the property owner was "a member of the class protected by the statute" and that the "injury" was "of the type the statute was intended to prevent."

Insurance Agents

In some instances, buyers have sued insurance agents for failing to provide accurate flood insurance information. For example, an Indiana court¹²⁸ remanded for trial a homeowner's claims against an insurance broker. The broker allegedly did not tell the homeowner that the \$72,000 of requested flood insurance had not been obtained. The court observed that an insurance broker retained to obtain insurance for another must use "reasonable skill, care, and diligence to obtain the desired insurance." In another case, an Ohio court ¹²⁹ held that an insurance agent could potentially be held liable for quoting a \$220 premium for \$75,000 in federal flood insurance when this premium actually entitled the homeowner to only \$3,700 in coverage. The homeowner had requested a quote from the agent prior to purchasing the house and claimed that he would not have gone forward with the sale if he had known the true price of the insurance. The court held that the insurance agent could potentially be held liable for misrepresentation.

PART 8: LIABILITY OF GOVERNMENT EMPLOYEES (DESIGN PROFESSIONALS) AS INDIVIDUALS

Individual Liability

¹²⁷ Small v. South Norwalk Savings Bank, 535 A.2d 1292 (Conn., 1988). See also Till v. Unifirst Federal Savings and Loan Association, 653 F.2d 152 (5th Cir., 1981) in which the court recognized that a common law claim might lie under state law and remanded the case to the state courts. See, however, R.B.J. Apartments, Inc. v. Gate City Savings & Loan Association, 315 N.W.2d 284 (N.D., 1982) in which the North Dakota court held that no state common law would lie. See Pippin v. Burkhalter, 279 S.E.2d 603 (S.C., 1981) for a similar result from South Carolina. In McKinley v. Northern Associates, Inc. (unpublished) No. 973151 (Mass., 1998) a Massachusetts court held that no state cause of action for negligence would lie when a bank failed to notify a lender of flood hazards. See also Laurent v. Flood Data Serv. Inc., 766 N.E.2d 221 (Oh., 2001) in which an Ohio court also held that no state cause of action would lie in contract or tort (negligence).

¹²⁸ Morgan v. Tackitt Ins. Agency, Inc. 852 N.E.2d 994 (Ind., 2006).

¹²⁹ Carpenter v. Scherer-Mountain Ins. Agency, 733 N.E.2d 1196 (Ohio, 1999). See also Robbins v. Marchant, 616 S.W.2d 736 (Ark., 1981) in which the court quoted with approval:

Where an insurance agent undertakes to procure a policy of insurance for another, affording protection against a designated risk the law imposes upon him the duty, in the exercise of reasonable care, to perform the obligation that he has assumed, and within the amount of the proposed policy, the agent may be held liable for any loss suffered by the applicant attributable to his failure to provide such insurance.

May a government engineer or architect be sued as a individual if they negligently design, approve or construct a bridge, highway, post office or other structure or undertake an activity such as grading or placing fill in a floodplain that results in flood damage to other government employees, members of the public, or adjacent landowners?

In general, no. Under the common law and many state "tort claim" acts, governmental officials are protected from suit as individuals ¹³⁰ if they perform the design, permitting, or construction within the scope of their jobs, if they are not grossly negligent or reckless¹³¹, and if they do not intentionally harm others. For example, the Supreme Court of Ohio held that members of a planning commission, council, and mayor were not subject to liability when they allegedly failed to provide timely approval of a plat for an area subject to flood and drainage problems. ¹³²The court concluded that these individuals had acted in good faith and within the scope of their official duties. The court also concluded that delay in approving the plat was not a temporary taking of private property. Another Ohio court held that borough engineers were not liable for having approved a subdivision plan which lacked adequate drainage.

Government Liability

Although design professionals employed by governments are not liable as individuals, their government units (local, state, federal) may be. Governments may be sued for negligence if public employees negligently design or construct a structure with resulting injury to a member of the public. 134 They may be liable if their employees provide inadequate flash flood warnings to members of the public on public lands. 135 They may be sued for negligence, trespass, nuisance or under another common law theory or for a taking of private property without payment of compensation under a state or the federal

¹³⁰ See, e.g., Breiner v. C & P Home Builders, Inc. 536 F.2d 27 (3rd Cir., 1976) in which the court held that both Borough engineers and the Borough itself were not liable for reviewing a subdivision plan with insufficient drainage. But the court held the subdivider and his construction company liable. See generally Kanagawa v. State By and Through Freeman, 685 S.W.2d 831 (Mo., 1985) for discussion of the immunity of officials for discretionary acts. See also Panepinto et. al. v. Edmart, Inc. 323 A.2d 533 (N.J., 1974). ¹³¹ See generally Staubes v. City of Folly Beach, 500 S.E.2d 160 (S.C., 1998) in which the court held that city might be held liable for gross negligence in denying a building permit for reconstruction after Hurricane Hugo. The South Carolina tort claim act exempted most permitting activities from liability except those "exercised in a grossly negligent manner." See many cases cited therein for a definition of "gross negligence". ¹³² C & D Partnership v. Gahanna, 474 N.E.2d 303 (Ohio, 1984)

¹³³ See Breiner v. C & P Home Builders, Inc., 536 F.2d 27 (3rd Cir., 1976)

¹³⁴ See, e.g., Cachick v. United States, 161 F. Supp. 15 (S.D. Ill, 1958) in which the court held that the Federal government was liable for failing to anticipate sustained winds from a thunderstorm in the 40-45 mph range with peaks in the 65-70 mph range in anchoring and constructing viewing stands used by spectators of military exercises with resulting injuries.

⁵ See, e.g., Ducey v. United States, 713 F.2d 504 (9th Cir.,1983) in which the court held that the Federal government was potentially liable for failure to provide warnings for flash flooding for an area subject to severe flooding in Lake Mead National Recreation Area. See also Coates v. United States, 612 F. Supp. 592 (C.D.III.,1985) in which the court held that the Federal government was liable for failure to give adequate flash flood warning to campers in Rocky Mountain National Park and to develop an adequate emergency management plan.

Constitution if they increase flood or erosion damage on nongovernmental lands. ¹³⁶ Governments are particularly vulnerable to suits for negligence based upon "ministerial" acts of employees such as improper maintenance of a drainage ditch. In general, governments are not liable for "discretionary" acts such selecting the flood passage design capacity for a bridge. ¹³⁷ One Florida court held that a local government was not liable for failing to supervise or terminate the employment of its building permit official who provided inaccurate flood building elevations because hiring and firing was a discretionary act. ¹³⁸

Exemptions in State Tort Claim Acts. State tort claim acts often provide at least partial design immunity to governmental units. For example, an Iowa court ¹³⁹ held that the Iowa tort claim act preserved a sovereign immunity defense for local governments and the state for the negligent design of a highway which caused flooding. The act provided qualified immunity for the "negligent adoption of design or specification, or negligent construction or reconstruction of a highway, secondary road, or street...that was constructed or reconstructed in accordance with a generally recognized engineering or safety standard, criteri(on), design theory in existence a the time of the construction or reconstruction." The court concluded that this act gave the Department of Transportation "a state-of-the-art defense" at the time of construction with respect to design and construction of highways and roads.

Denial of Civil Rights. In recent years, individuals have increasingly sued governmental officials or governmental units under Section 1983 of the Civil Rights Act of 1871, claiming that government employees have denied their civil rights ¹⁴⁰ Most of the successful suits have involved egregious activities such as beatings in prisons and have nothing to do with flooding. In some instances, however, landowners have sued governments for flooding private property. In others, landowners have sued governments

For a good overall discussion of Section 1983 litigation see Karen M. Blum, Suffolk university Law School, Basic Principles of Section 1983 Litigation (2006) available at http://www.njd.uscourts.gov/atty/3dCirbasics.pdf

¹³⁶ See, e.g., Phillips v. King County, 968 P.2d 871 (Wn., 1998) and cases cited therein.

¹³⁷ Julius Rothschild & Co. v. State, 655 P.2d 877 (Haw., 1982).

¹³⁸ See, e.g., Storm v. The Town of Ponce Inlet, 866 So.2d 713 (Fla., 2004) in which the court refused to allow suit against a town where the chief building official supplied false flood elevation information. See also C & D Partnership v. Gahanna, 474 N.E.2d 303 (Ohio, 1984) in which the court held that the approval of a subdivision was a discretionary act.

¹³⁹ K & W Electric, Inc. v. State, 712 N.W.2d 107 (Ia., 2006)

¹⁴⁰ The Civil Rights Act of 1871, codified, in part, at 42 U.S.C.A. Sec. 1983 (1979) has become an increasingly important basis for certain types of suits against local governments based upon Constitutional violations (takings, due process) although 1983 suits have had limited success in natural hazard regulatory and nonregulatory contexts. Section 1983 provides:

Every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory, or the District of Columbia subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in any action at law, suit in equity, or other proper proceeding for redress.

for adopting highly restrictive floodplain regulations. ¹⁴¹ Still others have sued governments for incorrect floodplain maps. ¹⁴²

State and federal courts have, with little exception, refused to hold governmental units liable under Section 1983 for flood-related damages for a variety of reasons:

- --The damages may be actionable in tort but do not reach the magnitude of a Constitutional civil rights violation. ¹⁴³
- --An adequate tort or Constitutional remedy (e.g., inverse condemnation) exists at state law and that this remedy must be exhausted before a federal civil rights claim may be made. ¹⁴⁴
- --One or more of the other essential elements of the case is lacking. For example, the Connecticut Appellate Court¹⁴⁵ held that the Town of Somers was not liable in a Section 1983 suit for a violation of due process where a town employee provided inaccurate flood elevations based upon an inaccurate FEMA map. The town was not liable for the flood map, in part, because the town had not "adopted a policy or continued a custom that resulted in a deprivation" of the plaintiff's constitutionally protected property interest. To succeed in a 1983 suit, the plaintiff must show that a governmental unit had such a policy or continued custom.

Most often courts have found governments not liable because the injury did not rise to the level of a Constitutional wrong:

--The federal 5th Circuit Court of Appeals¹⁴⁶ held that landowners had no Section 1983 claim where they alleged that the City of Cedartown negligently designed, constructed and maintained street and drainage systems with resulting flooding during periods of excessive rainfall. In dismissing the Section 1983 claim, the held that "Section 1983 plaintiffs must prove deprivation of a federal constitutional or legal right which "resulted from the sort of abuse of government power that is necessary to raise an ordinary tort by a government agent to the stature of a violation of the Constitution."

¹⁴¹ See, for example, Staubes v. City of Folly Beach, 500 S.E.2d 160 (S.C., 1998) in which the court held there was no violation of Section 1983 for a taking of private property or denial of due process when the city revoked a repair permit for a duplex damaged more than 50% of its value by Hurricane Hugo. However, the court held that the city might be liable in tort for gross negligence.

See, e.g., Ravalese v. Town of East Hartford, 608 F. Supp. 575 (D. Conn., 1985); Terrace Knolls, Inc. v. Dalton, 751 F. Supp. 1086 (N.D. Ohio, 1983).

¹⁴³ See, e.g., York v. City of Cedartown, 648 F.2d 231 (5th Cir., 1981).

¹⁴⁴ See, e.g., Bensch v. Metropolitan Dade County, 952 F. Supp. 790 (S.D. Fla., 1996); Clear Channel Outdoor v. City of Lakewood, Case No. 04-5427 FDB (D., Wash., 2005); Anderson v. Chamberlain, 134 F. Supp.2d 156 (D. Mass., 2001).

Ahern v. Fuss & O'Neill, Inc., 78 Conn. App. 202 (Conn., 2003). See also Terrace Knolls, Inc. v. Dalton, 751 F.2d 387 (6th Cir., 1984) in which the court held that there was no Section 1983 denial of due process or taking claim where a community adopted floodplain regulations and regulated development based upon an inaccurate flood map.

¹⁴⁶ See York v. City of Cedartown, 648 F.2d 231 (5th Cir., 1981). See also discussion and cases cited in Dutton v. City of Crest Hill, 547 F.Supp. 38 (D., Ill., 1982).

--The Supreme Court of Georgia¹⁴⁷ held that actions of Fulton County in draining surface water onto private property did not rise to the level of a Section 1983 civil rights violation although the county could be sued for maintaining a nuisance.

--A Texas court¹⁴⁸ held that the city of Watauga was not subject to suit pursuant to Section 1983 because there must be more than negligence in maintenance of a drainage ditch to recover for a due process violation under 1983.

Several courts have also specifically rejected Section 1983 claims for denial of due process in hazard contexts. 149

In addition, a federal district court held that loss of economic value from floodplain mapping did not provide the basis for a 1983 action. 150

However, a Minnesota court recognized a Section 1983 claim where a municipality attempted to eliminate a nonconforming use in a flood area without a hearing and formally determining the value of the structure or the cost of improvements and in a manner otherwise inconsistent with state statutes. ¹⁵¹

PART 9: AVOIDING OR REDUCING POTENTIAL LIABILITY

General Strategies

How can you as a design professional avoid or reduce potential liability? How can you keep your client—the homeowner, builder, bank, governmental unit—out of flood trouble?

The simplest answers are: Convince your client to stay out of flood hazard areas. If structures and/or activities must be located in a hazard area, carefully address potential liability issues in your design contract. Use conservative, state of the art designs with

¹⁴⁷ See Baranan v. Fulton County, 299 S.E.2d 722 (Ga., 1983).

¹⁴⁸ City of Watauga v. Tauton, 752 S.W.2d 199 (Tex., 1988).

¹⁴⁹ See City of Wautauqa v. Tayton, 752 S.W.2d 199 in which the court held that negligence of city in maintaining drainage way was not an adequate basis for a 1983 Due Process claim. See also Terrace Knolls v. Dalton, Dalton, Little & Newport, 571 F. Supp. 1086 (N.D. Ohio, 1983) in which the court held that regulating use of land subject to flooding is valid and does not constitute a denial of substantive due process although factual base for regulation may be inadequate; Zilber v. Town of Moraga, 692 F. Supp. 1195 (N.D. Cal., 1988) in which the court held that regulation designed to limit development in high slope ridge area not a denial of due process on its face.)

¹⁵⁰ See, Ravalese v. Town of East Hartford, 608 F. Supp. 575 (D. Conn., 1985) in which the court held that refusal of town to exclude plaintiff's land from floodplain despite amendment of F.I.A. map excluding land was not a taking subject to a 1983 suit.

¹⁵¹ See Oswalt v. Ramsey County, 371 N.W.2d 241 (Minn., 1985) in which the court held denial of a permit for rebuilding in flood hazard area was a taking subject to a 1983 claim because the procedure used in violation of a specific Minnesota statutory language pertaining to control of nonconforming structures. For another case in which the Supreme Court recognized a Section 1983 claim in a land use control contexts see Monterey v. Del Monte Dunes at Monterey, Ltd., 526 U.S. 687 (S.Ct., 1999). This case did not involve floodplain regulations.

ample safety factors if structures or activities are to be located in flood hazard areas. Apply a "no adverse impact" standard to any activity which may impact others. ¹⁵²

It is, of course, not always possible or practical to stay out of flood hazard areas. If you are considering entering into a design contract for a hazard area, we suggest:

First, seek information with regard to the specific flood hazard. Is there any physical evidence of the depth, duration and velocity and any special problems associated with flooding on the site? Are there high water marks on trees, flood debris in vegetation, or erosion? Are floodplain zoning maps available for the community and the site? If so, how recent are the maps? What are the flood elevations? Where are the floodplain and floodway boundaries? Is there any threat to life (flash flooding) as well as threat to property? How old is the hydrology and hydraulics on which you will be relying for the design. Changes in a watershed over time may result in 6 to 8 foot rise in water surface elevations during the occurrence of a flood having a one percent chance of occurrence. Are there any special flood problems such as ice jam flooding, long term flooding due to high ground water levels, alluvial fan flooding, and movable bed streams? If so, special care will be needed. Do zoning, subdivision or building codes address flooding? What elevations are required by the regulations? Is floodproofing allowed or required? Will the proposed project affect drainage? Will it increase runoff? Will it change the location of surface water discharge? Who might be affected? How? How much?

Second, educate yourself with regard to regulatory standards and floodplain loss reduction techniques which may constitute the overall "standard of care" in your profession and in the "community". Look carefully at all applicable federal, state, and local regulations. Familiarize yourself with flood-related manuals and guidance documents like those published in hard copy and on the internet by the Army Corps of Engineers and FEMA. See, for example, FEMA publications 55, 550 and FEMA technical bulletins. Bring yourself up to speed with regard to technological and design developments in the literature. Attend continuing education flood design related conferences and workshops like those presented by FEMA, the Association of State Floodplain Managers, and other organizations. Examine other architect's work and project designs.

Third, investigate the more specific standard of care which may be appropriate for the specific type of proposed structure or activity in the specific hazard area. Remember that different standards of care may apply to specific types of structures and activities in

https://www.fema.gov/pdf/rebuild/mat/fema499/hgcc_fact02.pdf

¹⁵² See Association of State Floodplain Managers papers and publications dealing with no adverse impact. See, e.g., http://www.floods.org/NoAdverseImpact/whitepaper.asp See also See more generally many cases cited in Jon Kusler and Edward Thomas, No Adverse Impact Floodplain Management and The Courts. Association of State Floodplain Managers, Inc. (2005). http://www.floods.org/NoAdverseImpact/NAI_Legal_Paper_102805.pdf

¹⁵³ See FEMA, Coastal Construction Manual (55); FEMA, Recommended Residential Construction for the Gulf Coast (550), and Summary of Coastal Construction Requirements and Recommendations at http://www.fema.gov/pdf/plan/prevent/nhp/nhp_fema55.pdf; http://www.fema.gov/pdf/plan/prevent/nhp/nhp_fema55.pdf; and

particular areas. For example, one specific standard of care may apply to design of a dam in Florida with no threat of ice and another in Minnesota where ice jams are common. One standard may apply to a dam with the threat of catastrophic damage due to failure and another to design of a flood-proofed private residence. If you suspect problems which could have serious consequences and you or your firm do not have expertise, call in a consulting architect/engineer, floodplain manager or other professional with expertise in flooding and flood design relevant to the type of structure and specific flood hazards. It may also be wise to conduct a hydrology and hydraulics analysis for "future conditions" if your project is located in an area where flood heights may increase over time.

Fourth, thoroughly discuss the hazard issue with your client. This discussion should address not only possible flood damages to the proposed project but damages to third parties. Potential liability problems with your client may be reduced through discussion and incorporation of flood-related provisions and disclaimers in the design contract. Possible damages to third parties may also be reduced through design measures such as a careful grading plan. Discuss the sorts of permits which will be needed. What degree of flood protection is required by codes? What degree and type of protection does your client want? What do you recommend for your client? How might flooding affect financing? What should a prospective general contractor be told?

Keep a written record of your concerns and discussions. This can help you in drafting your contract and address any ambiguities in the contract should later disagreements occur. It can also help if you find yourself in court at a later date.

Fifth, *deal with the flood problem and potential liability in the contract*. This can reduce your liability to your client although it will not wholly protect you from liability to third parties such as adjacent landowners. In developing a contract with your client, specify what flood data is to be used as the basis for the design. Be specific. Specify the map series, date, etc. because flood maps often change over time. Agree upon what flood elevation is to be used for design (e.g., the 100 year flood elevation specified on FEMA maps plus freeboard). Specify who is to bear the risk of liability if there are offsite impacts and suits result. Specify who is to bear the risk if there are inaccuracies in the data or offsite impacts. Disclaim liability for flooding damages from floods larger than the specified design flood. Do not warrant "protection from flooding" because of the inherent uncertainties in flood prediction and the response of structures If additional flood data is needed, agree who is to provide such data, at what cost, and within what time frame. Consider and reflect in your contract any delays or expenses that may result if flooding occurs while the project is underway. Agree who will pay for flood and other types of liability insurance and the limits of such insurance.

Sixth, in the actual design of the project, carefully comply with all terms of the contract, regulatory code specifications, and possible public safety consequences. Incorporate an appropriate safety factor in your design appropriate to types and severity of the hazards. If you are sued for negligence, courts and juries will hold you to a standard of care consistent with the risks and foreseeable consequences.

Risks will vary according to the type of activity. You will be held to a high standard of care in design of a dam or levee where failure may cause severe economic damages and loss of life.

Remember that in many jurisdictions there is an implied warranty of suitability or habitability for new residences and that even considerable care in design will not necessarily protect your landowner/builder client from liability to buyers if flood damages occur.

Seventh, if you as a design profession are also responsible for construction (and many firms provide both design and construction services) make sure that all contract specifications are met and that even temporary measures (e.g., grading) do not cause onsite or offsite flooding and erosion. During both design and construction the client should be kept informed at each step with regard to progress and any problems which are arising.

Eight, carry insurance to cover risks such as damage to a partially constructed structure due to flooding. Also, carry liability insurance to third parties

Ninth, if you are sued by your client or a third party, it will be *helpful for you to show* that you exercised greater care than the minimum called for in regulations and by "customary" practices in your area. Compliance with the standard of care in the profession and variations from this standard are jury questions and a design professional may be viewed unsympathetically by a jury if his or her only defense to an injury claim is compliance with a minimum standard of care. Argue (if you can) that your actions meet or exceed statewide or national standards of conduct, not just regional or location. Introduce books, manuals, papers to back up your claim.

You may have a variety of other defenses in addition to compliance with the appropriate standard of care. If you are sued by your client, your contract with your client including all disclaimers and qualifications is your number one line of defense. You may have other defenses as well to a suit by your client or a suit by third parties such as statute of limitation or repose, no duty, public duty doctrine, official immunity, discretionary immunity, common enemy doctrine (surface water), insufficient showing of causality, the economic loss rule, act of God, no privity, contributory negligence, and sovereign immunity. Your lawyer will need to determine which defenses may apply and which are supported by the facts. He will then plead them appropriately.

If years have passed from the time you completed the design and the law suit, you may be protected by a statute of "limitation" or "repose". 154 Almost all states have adopted

¹⁵⁴ A statute of "repose" differs from a traditional statute of limitation. As the court in Dallas Market Cntr Dvlpmnt v. Beran, 824 S.W.2d 218 (Tex., 1992) stated: "A traditional statute of limitations runs from the time that a cause of action accrues, when is when the injured party discovers or reasonably should have discovered a defect or injury....With a statute of repose, the time period begins running when the improvement is substantially completed rather than when a cause of action accrues...Therefore a statute of

statutes or repose which limit the liability of design professionals to ten years of less from the point of design. ¹⁵⁵ Courts have held that with a statute of limitation the period of limitation begins to run when the design defect become known to the injured party. ¹⁵⁶ In contrast, courts have held that with a statute of repose the period begins to run when the design professional has completed his work. ¹⁵⁷

More Specific Strategies

The above recommendations apply to practically any situation. What additional recommendations may be made for reducing flood-related liability for particular clients?

Your client, *the property owner* should be made aware that any project design which will increase flood damages on other lands from water in watercourses or diffused surface waters must be undertaken at his or her peril. The property owner should apply a "no adverse impact" standard to avoid offsite problems. He or she should also be prepared to divulge any flood problems when the property is offered for sale. He or she should be aware that if they act as a subdivider and/or builder the lots/residential houses they sell may be subject to an implied warranty of fitness or habitability.

Your client, the *builder* should not warrant fitness, only compliance with plans. He or she should avoid any offsite impacts from flooding or erosion due to grading, fills, ditching, or other activities. The builder should provide in the construction contract that the owner will bear any added costs if flood damages occur during construction. The *builder/seller* should fully divulge any known flood hazards to the real estate broker and to buyers. The builder/seller may also be able to reduce liability pursuant to any claim of "implied warranty of suitability or habitability" by expressly disclaiming liability in any sale contract.

Your client a *realtor or insurance broker* should check Federal Emergency Management Agency Rate Maps and divulge to potential buyers or insurance clients any flood or erosion hazards which may (at the minimum) be revealed by the Maps, local zoning or other regulations.

Your client a *governmental engineer or architect* undertaking any activity in a flood hazard area should make sure that any activity he undertakes is within the scope of his or her officials duties to avoid personal liability. Your client the *governmental unit* should be aware that governmental units are responsible for activities of staff or contractors and

respose can cut off a right of action before an injured party discovers or reasonably should have discovered the defect or injury." A statute of repose need not be affirmatively pleaded because it extinguishes both a plaintiffs remedy and right. See Cheswold Vol. Fire Co. v. Lambertson, 489 A.2d 413 (Del., 1984).

¹⁵⁵ Id. In this case the court upheld against constitutional challenge a statute of repose which provided that after six years no cause of action will arise "from deficiencies in the construction of an improvement of real property".

¹⁵⁶ See, e.g., ABC Builders, Inc. v. Phillips, 632 P.2d 925 (Wyo., 1981).

¹⁵⁷ See, e.g., Dallas Market Cntr Dvlpmnt v. Beran, 824 S.W.2d 218 (Tex., 1991)

any activity which increases flood heights or velocities on other lands will subject the governmental unit to potential liability.

All clients—property owners, builders, realtors, insurance agents, or government units—should encourage the purchase of flood insurance by individuals who may be subject to flood damage. In general, individuals adequately compensated by insurance for flood damage do not bring law suits.

APPENDIX A: SELECTED BIBLIOGRAPHY: TREATISES AND AMERICAN LAW REPORTS (ALR SERIES)

Books

Acret, James, Architects and Engineers: The Professional Responsibilities, McGraw Hill Books, New York (1977)

American Institute of Architects and Joseph A. Demkin, The Architect's Handbook of Professional Practice, American Institute of Architects (2005)

Bockrath, Joseph, Contracts, Specifications and Law for Engineers, 4th Ed., McGraw-Hill Book Company, New York, N.Y. (1986)

Jabine, William., Case Histories in Construction Law: A Guide for Architects, Engineers, Contractors and Builders, Cahners Publishing Co., Boston (1973)

Sido, Kevin, Architect and Engineer Liability: Claims Against the Design Professional, Third Edition, Aspen Publishers (2006)

Streeter, Harrison, Professional Liability of Architects and Engineers, John Wiley and Sons (1988)

Sweet, Justine, Legal Aspects of Architecture, Engineering and the Construction Process, Thompson Engineering (2004).

Architect Liability ALR Reports

Annot., "Architect's Liability for Personal Injury or Death Allegedly Caused by Improper or Defective Plans or Design," 97 ALR3d 455 (1980)

Annot., "Liability to One Injured in Course of Construction, Based upon Architect's Alleged Failure to Carry Out Supervisory Responsibilities," 59 A.L.R. 3d, 869 (1974)

Annot., "When Statute of Limitation Begins to Run on Negligent Design Claim Against Architect," 90 ALR3d 507 (1979)

Miscellaneous Liability ALR Reports

Annot., "Tort Liability of Project Architect for Economic Damages Suffered by Contractor," 65 A.L.R. 3d 249 (1975).

Annot., "Recovery Under Strict Liability in Tort, for Injury or Damage Caused by Defects in Building or Land", 25 ALR4 351 (1983)

Annot., "Validity, as to Claim Alleging Design or Building Defects, of Statute Imposing Time Limitations Upon Action Against Architect, Engineer, or Builder for Injury or Death Arising Out of Defective or Unsafe Condition of Improvement to Real Property," 5 ALR6th 497 (2005)

Broker, Bank Liability ALR Reports

Annot., "Financing Agency's Liability to Purchaser of New Home or Structure for Consquences of Construction Defects" 20 ALR5th 499 (1994)

Annot., "Liability of Vendor's Real Estate Broker or Agent to Purchaser for Misrepresentations as to or Nondisclosure of Physical Defects of Property Sold," 8 ALR3d 550 (1966)

Annot., "Real-Estate Broker's Liability to Purchaser for Misrepresentation or Nondisclosure of Physical Defects in Property Sold," 46 ALR4th 546 (1986)

Seller Liability ALR Reports

Annot., "Validity, Construction, and Application of New Home Warranty Acts, 101 ALR5th 447 (2002)

Annot., "Vendor and Purchaser: Mutual Mistake as to Physical Condition of Realty as Ground for Recission," 50 ALR3d 1188 (1973)

Annot., "Duty of Vendor of Real Property to Disclose to Purchaser Condition of Building Thereon Which Affects Health or Safety of Persons Using Same," 141 ALR 967 (1942)

Annot., "Liability of Vendor or Grantor of Real Estate for Personal Injury to Purchaser or Third Person Due to Defective Condition of Premises," 8 ALR2d 218 (1949)

Annot., "Liability of Builder of Residence for Latent Defects Therein As Running to Subsequent Purchasers from Original Vendee," 10 ALR4th 385 (1981)

Annot., "Fraud Predicated on Vendor's Misrepresentation or Concealment of Danger of Flooding or Other Unfavorable Water Conditions." 90 ALR3d 568 (1979)

Annot., "Liability of Vendor of Structure for Failure to Disclose That It was Built on Filled Ground," 80 ALR2d 1453 (1961)

Annot., "Liability to Prospective Tenant or Purchaser for Injury Resulting From Condition of Premises," 3 ALR3rd 976 (1965)

Annot., "Mutual Mistake as to Physical Condition of Realty as Vendor and Purchaser: Ground for Recission, 50 A.L.R.3d 1188 (1973)

Annot., "Liability of Builder-Vendor or Other Vendor of New Dwelling for Loss, Injury, or Damage Occasioned by Defective Condition Thereof," 25 ALR3d 383 (1969)

Annot., "Liability of Vendor of Condominiums for Damages Occasioned by Defective Condition Thereof." 50 ALR 3d 1027 (1973)

Local Government Liability ALR Reports

Annot., "Liability of Government for Issuance of Permit for Construction Which Caused or Accelerated Flooding," 62 ALR3d 514 (1975)

Annot., "Liability of Municipal Corporation for Negligent Performance of Building Inspector's Duties," 41 ALR3d 567 (1972), 24 ALR5th 200

Annot., "Liability of Municipality or Other Governmental Subdivision in Connection With Flood Protection Measures," 5 ALR2d 57 (1949)

Annot., "Municipal Immunity from Liability From Torts," 60 ALR2d 1198 (1958)

Annot., "Municipal Liability Arising From Negligence or Other Wrongful Act in Carrying Out Construction or Repair of Sewers and Drains," 61 ALR2d 874 (1964)

Annot., "Municipalities of Municipal Corporation for Damage to Property Resulting From Inadequacy of Drains and Sewers Due to Defects in Plan, 173 ALR1031 (1948)

Annot., "Municipality's Liability for Damage Resulting from Obstruction or Clogging of Drains or Sewers," 59 ALR2d 281 (1958)

APPENDIX B: COMMON QUESTIONS CONCERNING DESIGN LIABILITY

Are you as an architect or engineer responsible to your client for the design of a structure which is subsequently damaged by flooding?

Under certain circumstances you may be. You may be liable if the flooding is due to inadequate design, if you have not followed contract specifications, or if you have not followed all applicable regulations. The design must meet the standards of the architectural or engineering profession in your "community".

Are you responsible to third parties which may be damaged by flooding caused by the structure/activity you have designed?

In many jurisdictions, yes. But, much depends upon the circumstances.

Are you responsible for investigating flood hazards under a design contract?

You may be. It depends upon the contract. It also depends upon the type of proposed use and the risk to other properties.

Must you comply with all applicable regulations?

Yes. Violation of a regulation will usually violate your contract. It will also (outside of the context of your contract) be at least evidence of negligence.

Does compliance with all applicable regulations bar a law suit?

No, not necessarily. Compliance, of course, helps. But, courts have, in some instances, held that individuals must do more than comply with minimum legal requirements to avoid liability.

Are you as a government engineer or architect personally responsible for bridges, roads, or public buildings which you design, construct, or supervise the construction of which increase flooding on other lands?

In general, no as long as you are acting within the scope of your job and are not intentionally or grossly negligent.

Is your governmental unit liable?

In many instances, yes. This is particularly true if the activity causing the offsite damage is a ministerial (discretionary) in nature.

May you be sued for a civil rights violation pursuant to Section 1983 of the Civil Rights Act for designing or constructing a structure or placing a fill which increases flood and other damages on adjacent lands?

In general, no.

As a seller of land or buildings do you need to divulge known flood hazards to buyers?

In general, yes.

May you be responsible for flood damages if you sell new house in a floodplain? Yes, particularly if you are a commercial builder of new residences.

If you are a real estate broker, do you need to actively investigate whether flood hazards exist before you sell a house?

No, but you need to divulge any known hazards.

Is a bank liable for failing to tell a mortgagee that a property is in a flood zone and is subject to floodplain regulations?

In general, no.

APPENDIX C: SUGGESTED WEB PAGES ADDRESSING PROFESSIONAL LIABILITY (Note, this is not an exhaustive list. These are sites which we have

encountered which we found useful.)

http://72.14.209.104/search?q=cache:QvevarPtitUJ:www.terrarrg.com/images/pdfs/Stand

ardofCare.pdf+Standard+of+Care+in+Professional+Liability+Actions&hl=en&ct=clnk&cd=1&gl=us

This article by Howard W. Ashcraft, Jr. of Hanson, Bridgett, Marcus,

Vlahos & Rudy, LLP addresses the Standard of Care in Professional Liability Actions.

http://www.judiciary.state.nj.us/civil/charges/538.htm This site includes jury instructions and cases pertaining to the Standard of Care in Professional Liability Actions.

<u>http://onlineethics.org/eng/cases.html</u>. This site by Case Western Reserve University describes cases on Engineering Practice Ethics which include some cases dealing with liability.

http://72.14.209.104/search?q=cache:zFLQymqL-

IMJ:www.brownmccarroll.com/pdfs/Professional%2520Liability%2520Engineers.pdf+St andard+of+Care+in+Professional+Liability+Actions&hl=en&ct=clnk&cd=72&gl=us
This article by Joe Davis and Daniel Smith discusses the professional liability of engineers in Texas.

http://www.jurispro.com/search/profile/subcategory/2437 This site lists professional liability expert witnesses and legal consultants. It is not the only site of its kind on the web. See, e.g., http://www.ewitness.com/srch/professional-liability-experts-witnesses.htm

http://72.14.209.104/search?q=cache:DYjXVjCUjg0J:www.psrb.com/articles/environmental consultants.doc+Standard+of+Care+in+Professional+Liability+Actions&hl=en&ct=clnk&cd=251&gl=us This site contains a paper by George Plews and Jeffery Featherstun entitled "Legal Liability Problems Confronting Environmental Consultants." It does not address engineer/architect liability for flooding directly.

http://72.14.209.104/search?q=cache:k9im3XZDmN4J:mhigh.okstate.edu/Presentations/Engineering%2520Malpractice.pdf+Standard+of+Care+in+Professional+Liability+Actions&hl=en&ct=clnk&cd=260&gl=us This site contains an article by Martin High: Engineering Malpractice: Avoiding Liability through Education.

<u>http://ConstructionRisk.com</u>. This site hosts a monthly newsletter with construction law cases.

See http://www.floods.org/PDF/NAI Liability Failure Facilities 0906.pdf. This site contains an excellent article by Ed Thomas: Liability for Water Control Structures Failure Due to Flooding.

http://www.aia.org/SiteObjects/files/statuteofreposecompendium.pdf This paper by AIA Government Advocacy is a "Compendium: State Statutes of Limitation and Repose 2nd Ed. (2004)

 $\underline{http://www.njd.uscourts.gov/atty/3dCirbasics.pdf} \ . \ This is paper by \ Karen \ M. \ Blum \ sets forth \ Basic \ Principles \ of \ Section \ 1983 \ Litigation.$