

SUPREME COURT OF PENNSYLVANIA

Shamnoski v. PG Energy, 579 Pa. 652

858 A.2d 589 (Pa. 2004) · Decided September 28, 2004

SUMMARY

The Supreme Court of Pennsylvania reviewed negligence claims arising from flooding allegedly associated with PG Energy's upstream water-supply dams during Hurricane Gloria. The Court addressed whether the Dam Safety and Encroachments Act and related regulations imposed duties to increase spillway capacity, draw down reservoirs, issue warnings, and protect downstream property owners from storm-related flooding. The Court held that PG Energy was not negligent as a matter of law and reversed the lower courts.

CASE DETAILS

COURT	Supreme Court of Pennsylvania
WRITING FOR THE COURT	Justice Castille; Chief Justice Zappala; Justice Cappy; Justice Nigro; Justice Newman; Justice Saylor; Justice Eakin
JURISDICTION	Pennsylvania
DECIDED	September 28, 2004
DISPOSITION	reversed
PROCEDURAL POSTURE	Appeal from the affirmance of a judgment imposing negligence liability on PG Energy for flooding-related property damage; the Supreme Court reviewed the lower courts' refusal to grant judgment notwithstanding the verdict.
STANDARD OF REVIEW	Review of the legal propriety of judgment notwithstanding the verdict is plenary. The court considers whether, viewing the record in the light most favorable to the verdict winner and granting all favorable inferences, sufficient competent evidence supports the verdict; credibility determinations and evidentiary conflicts are not reweighed.
PRECEDENTIAL VALUE	published precedential opinion
PARTIES	PG Energy, a Division of Southern Union Company, formerly known as PG Energy, Inc. v. Stephen A. Shamnoski and Dorothy Shamnoski, Richard Rubel and Adele Rubel, Lorraine McDonald

TOPICS

negligence

duty of care

statutory interpretation

administrative law

environmental law

PRACTICE AREAS

torts

negligence

environmental law

administrative law

QUESTIONS PRESENTED

1. Whether Section 693.13 of Pennsylvania's Dam Safety and Encroachments Act and related regulations impose a general duty on water-supply dam owners to control flooding or protect downstream property from stormwater unrelated to structural dam failure.
2. Whether a violation of Section 693.13 constitutes negligence per se.
3. Whether the evidence established that PG Energy breached a legal duty and was negligent when its dams did not structurally fail and the flooding resulted from Hurricane Gloria's natural runoff.
4. Whether judgment notwithstanding the verdict should have been granted.

HOLDINGS

1. The Dam Safety and Encroachments Act and its implementing regulations impose duties directed to the safety and structural integrity of the dam facility, including protection against foreseeable harms resulting from facility failure; they do not impose a general duty to control natural flooding or insure downstream property owners against stormwater unrelated to structural dam failure.
2. A violation of Section 693.13 does not constitute negligence per se because the statute states a general reasonable-person standard and does not prescribe sufficiently specific conduct.
3. The evidence was insufficient as a matter of law to establish negligence because the dams did not fail structurally and the homeowners' damages resulted from the natural effects of Hurricane Gloria rather than water released through a dam breach or failure.

KEY QUOTATIONS

"A violation of Section 693.13 of the Dam Safety Act is not an appropriate basis for a finding of per se negligence." (674)

"We hold that the evidence here was insufficient as a matter of law to prove that appellant was negligent." (676)

"Because the dams did not fail, and the damages which appellees sustained were a result of the natural effect of the storm, appellant did not breach any legal duty to appellees." (680)

FACTUAL BACKGROUND

Hurricane Gloria dropped more than six inches of rain on the Springbrook Creek watershed in less than twenty-four hours, flooding or destroying the downstream homeowners' properties. PG Energy operated four permitted water-supply dams upstream from the properties. The dams did not structurally fail, burst, leak, or wash away, and some reservoir capacity actually retained part of the stormwater. The homeowners nevertheless claimed that

PG Energy negligently maintained inadequate spillways, failed to draw down the reservoirs, and failed to warn of a dam hazard emergency.

PROCEDURAL HISTORY

The trial judge, sitting as factfinder in an equity action, entered judgment for the downstream homeowners. The Superior Court affirmed the liability determination, initially remanding only the issue of delay damages and later affirming the final decree. The Supreme Court granted review and reversed, entering judgment for PG Energy.

DISPOSITION

reversed

CASES CITED

- Phillips v. A-Best Products Co., 542 Pa. 124, 665 A.2d 1167 (1995)
- Wenrick v. Schloemann-Siemag Aktiengesellschaft, 523 Pa. 1, 564 A.2d 1244 (1989)
- Commonwealth, Dep't of Transp., Bureau of Traffic Safety v. Korchak, 506 Pa. 52, 483 A.2d 1360 (1984)
- Adamski v. Miller, 545 Pa. 316, 681 A.2d 171 (1996)
- Beaver Valley Power Co. v. National Eng'g & Contracting Co., 883 F.2d 1210 (3d Cir. 1989)
- Miller v. Hurst, 302 Pa. Super. 235, 448 A.2d 614 (1982)
- Sharpe v. St. Luke's Hosp., 573 Pa. 90, 821 A.2d 1215 (2003)
- Althaus ex rel. Althaus v. Cohen, 562 Pa. 547, 756 A.2d 1166 (2000)
- Sinn v. Burd, 486 Pa. 146, 404 A.2d 672 (1979)
- Lucas v. Ford, 363 Pa. 153, 69 A.2d 114 (1949)
- LaForm v. Bethlehem Twp., 346 Pa. Super. 512, 499 A.2d 1373 (1985)
- Piekarski v. Club Overlook Estates, Inc., 281 Pa. Super. 162, 421 A.2d 1198 (1980)

OPINION

Shamnoski v. Pg Energy 858 A.2d 589

PER CURIAM.

858 A.2d 589 (2004) Stephen A. SHAMNOSKI and Dorothy Shamnoski, His Wife, Individually and as Parents and Natural Guardians of Stephen J. Shamnoski, William D. Shamnoski, Anthony G. Shamnoski and Ellen M. Shamnoski, Their Children, Appellees v. PG ENERGY, a DIVISION OF SOUTHERN UNION COMPANY, Formerly known as PG Energy, Inc., Appellant, v. Commonwealth of Pennsylvania, Department of Environmental Resources. Richard Rubel and Adele Rubel, His Wife, Individually and as Parents and Natural Guardians of Richard Rubel and Karra Rubel, Their Children, Appellees v. PG Energy, a Division of Southern Union Company, Formerly Known as PG Energy, Inc., Appellant v. Commonwealth of Pennsylvania, Department of Environmental Resources. Lorraine McDonald, 701 South Main Street, Scranton, Lackawanna County, PA, Appellees v. PG Energy, a Division of Southern Union Company, Formerly Known as

PG Energy, Inc., Appellant v. Commonwealth of Pennsylvania, Department of Environmental Resources. Supreme Court of Pennsylvania. Argued April 10, 2002. Decided September 28, 2004.

*591 Thomas A. Specht, Scranton, John P. Moses, Wilkes Barre, Charles W. Craven, Philadelphia, Jeffery H. Sunday, Wilkes Barre, for PG Energy, a Div. of Southern Union Co., appellant.

Richard P. Mather, Harrisburg, Mary Louise Barton, for Dept. of Environmental Protection, appellant amicus curiae. Jonathan P. Nase, Michael D. Klein, Harrisburg, Velma Arlene Redmond, Hershey, for PA-American Water Co., appellant amicus curiae. Conrad A. Falvello, Sugarloaf, for Shamnoski et al., Richard Rubel and Adele Rubel, his wife and L. McDonald, appellees. Before: ZAPPALA, C.J., CAPPY, CASTILLE, NIGRO, NEWMAN, SAYLOR and EAKIN, JJ.

OPINION OF THE COURT

Justice CASTILLE. This negligence action arose in the wake of the flooding of Springbrook Creek in Luzerne County, which resulted when Hurricane Gloria dropped over six inches of rain into that area in less than a twenty-four hour period ending in the early afternoon of September 27, 1985. Appellees are three homeowners, each of whom owned a separate parcel of residential real property along the banks of Springbrook Creek which was washed away or severely damaged by Gloria's floodwaters. Appellant PG Energy owned, maintained and operated four permitted water supply dams with attendant reservoirs in the Springbrook Creek watershed, all of which were upstream from appellees' properties.[1] Appellees claimed that the negligent design, maintenance and operation of the reservoirs/dams caused their losses, and prevailed in the action in the courts below. The primary issue which this Court accepted for review is what legal duty a water supply reservoir/dam owner has to undertake with respect to its dams in order to protect downstream property owners against floodwaters caused in the aftermath of a storm of the magnitude of Hurricane Gloria. Because we find that appellant was not negligent as a matter of law, we reverse the determinations below and enter judgment in favor of appellant.[2]

*592 As the respective geographical elevations of appellant's reservoirs/dams reveal, Springbrook Creek is a fairly steep mountain waterway: the Maple Lake Reservoir/Dam is at an elevation of approximately 1617 feet above sea level; the Watres Reservoir/Dam is at approximately 1440 feet of elevation; the Nesbitt Reservoir/Dam is at approximately 1166 feet of elevation; and the Springbrook Intake Reservoir/Dam is at approximately 915 feet of elevation. The distance from Maple Lake to Springbrook Intake is approximately 5.3 miles. Appellees' properties were in close proximity to one another, at an elevation of approximately 700 feet, and one-half to three-quarters of a mile down-stream from Springbrook Intake.

Certain factual issues were disputed at trial, such as whether any of appellant's dams actually "overtopped" that is, whether the volume of floodwater was such that the dams were unable to discharge the excess water gradually via the dams' spillways,[3] to a point where the water spilled over the dams themselves (which are at significantly higher elevations than the spillways) and what amount of rainfall were these dams required to be able to pass via spillway to be deemed safe for their intended purposes. Other salient facts, however, were not disputed, such as the fact that

these dams were designed primarily to create water supply reservoirs, not as flood control dams; and that the dams did not fail as a structural matter i.e., they did not spring leaks, burst, or wash away, and they held back the rain and rushing floodwaters to the maximum of their storage capacities.[4] In addition, there is no dispute that, because certain of the reservoirs were not filled to capacity when Hurricane Gloria hit, the dams actually prevented some of Gloria's rain and flash floodwaters from passing downstream at all. Thus, the floodwater that washed away appellees' homes was attributable to Hurricane Gloria, and not to the water already pooled in appellant's upstream reservoirs when the storm hit. The theory of negligence pursued below was that appellant was obliged by both statute and by administrative regulation to do more than ensure that its dams did not fail structurally. Appellees claimed that, in addition to creating reservoirs of drinking water essential to the public health and welfare, appellant's dams were required to be designed, maintained and operated so as to cabin and safely pass on the rain and floodwaters which accompany a storm of the magnitude of Hurricane Gloria. Specifically, appellees alleged that appellant had a duty to design and maintain the dams with greater spillway capacities; that appellant was obliged to "draw down" the level of water in its reservoirs in anticipation *593 of the storm; and that this storm posed a "dam hazard emergency," as that term is defined by regulation, which obliged appellant to warn downstream homeowners of the danger they faced from floodwaters as the storm intensified. The defense was that the duty of dam safety owed by appellant was confined to ensuring that the dams did not fail as a structural matter and, because these dams successfully passed the increased volume of water without failing structurally, no liability can arise. The courts below, while employing divergent legal theories of negligence liability, each concluded that although appellant's dams did not fail, appellant violated a duty to construct, maintain and operate them in a fashion that would have protected the downstream homeowners from these floodwaters, and that the homeowners' losses were the proximate result of that breach of duty. Procedurally, the question before this Court is the propriety of the lower courts' rulings upon appellant's motion for judgment notwithstanding the verdict ("judgment n.o.v."). That verdict was rendered by the trial judge, who sat as the factfinder in this equity action. Our scope of review with respect to whether judgment n.o.v. is appropriate is plenary, as with any review of questions of law. *Phillips v. A-Best Products Co.*, 542 Pa. 124, 665 A.2d 1167, 1170 (1995). The proper standard of review for an appellate court when examining the lower court's refusal to grant a judgment n.o.v. is whether, when reading the record in the light most favorable to the verdict winner and granting that party every favorable inference therefrom, there was sufficient competent evidence to sustain the verdict. *Wenrick v. Schloemann-Siemag Aktiengesellschaft*, 523 Pa. 1, 4, 564 A.2d 1244, 1246 (1989). Questions of credibility and conflicts in the evidence are for the trial court to resolve and the reviewing court should not reweigh the evidence. *Commonwealth, Dep't of Transp., Bureau of Traffic Safety v. Korchak*, 506 Pa. 52, 57, 483 A.2d 1360, 1362 (1984). *Adamski v. Miller*, 545 Pa. 316, 681 A.2d 171, 173 (1996). A review of the record and the trial judge's written findings of fact reveals the following: Appellant's reservoirs/dams were of earthen

embankment construction and were erected between 1893 and 1925. The primary purpose of the dams was to collect and supply drinking water for public consumption. In the late 1970s, the U.S. Army Corps of Engineers administered a "National Dam Inspection Program" in response to the federal Dam Inspection Act. In conjunction with that program, consulting engineers prepared inspection reports for each of appellant's four dams between July of 1978 and April of 1980. There is no suggestion in the reports, or elsewhere in the record, that the inspections sought to uncover violations of existing federal or Pennsylvania law and/or standards concerning the construction and maintenance of water supply reservoirs/dams. Rather, the stated purpose of the inspections and reports was to determine if the dams "constitute[d] a hazard to human life or property." The reports concluded that the Springbrook and Nesbitt dams were in "good" condition, while the Watres dam was in "fair" condition and the Maple Lake dam was in "poor" condition. Maple Lake Dam was rated "unsafe" because its spillway capacity was "seriously inadequate" as it could pass only 42 percent of the Probable Maximum Flood ("PMF") without overtopping the dam. The Pennsylvania Administrative Code provisions concerning dam safety define the PMF as:

*594 The flood that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in an area. The PMF is derived from the probable maximum precipitation (PMP) as determined on the basis of data obtained from the National Oceanographic and Atmospheric Administration (NOAA).

25 Pa.Code § 105.1.[5] The Maple Lake report further noted that, if the dam should "fail," it would "significantly increase tailwater and cause loss of life downstream." The spillways on the Watres and Nesbitt dams likewise were deemed to be "seriously inadequate" because they too could not pass one-half of the PMF without overtopping the respective dams and, should the dams fail, there would be a risk of loss of life downstream. The spillways on Springbrook fared somewhat better, being deemed merely "inadequate," as they could pass about 53 percent of the PMF before that dam would be overtopped. All four dams were classified as "high hazard." [6] The reports made various recommendations respecting how to improve the physical condition of each dam and to increase spillway capacity. Appellant produced evidence that, in response to the reports, it performed maintenance and repair work on the dams which effectively increased spillway capacity, albeit it did not reengineer the dams or spillways or undertake a major reconstruction effort. In addition, at the time when Hurricane Gloria struck, the reservoirs/dams were subject to inspection and regulation by the then-Pennsylvania Department of Environmental Resources ("DER"); the dams were permitted by DER. The trial court found as fact that, between the time of the reports to the Army Corps of Engineers and the arrival of Hurricane Gloria on September 27, 1985, appellant did not substantially improve, increase, modify or change the spillway capacity of any of the facilities. On September 27, 1985, Hurricane Gloria rapidly passed through the Springbrook Creek watershed in Lackawanna and Luzerne Counties, dumping substantially more rain (by a factor of two to three) than had been forecast by the National Weather Service ("NWS"). Appellees introduced expert testimony that the rainfall from the hurricane was so heavy as to

exceed fifty (50%) percent of the PMF, which in turn should have exceeded the spillway capacities on the dams. This point was sharply disputed at trial. Appellees' expert engineer, James Green, used the terms PMF and "100-year storm" interchangeably in discussing the rainfall, then calculated the 100-year storm/flood rainfall figure for Luzerne County as a mere 5.98 inches. Since the rainfall in the Springbrook Creek watershed from Hurricane Gloria exceeded 6.5 inches, Green concluded that the spillways obviously were inadequate to handle the storm. Green further opined that, pursuant to "standards in the engineering community," dams must be designed to handle a 100-year frequency flood, irrespective of whether they are designed for water supply or flood control. Green also opined that one or more of appellant's dams "definitely *595 overtopped" or "flooded" and that the inadequacy of the dam system to handle this storm was the cause of the flood which destroyed appellees' homes. However, Green did recognize that none of the dams failed structurally and that two of the reservoirs/dams (Watres and Nesbitt) were drawn down to well below capacity when the storm began; thus, the dam system actually protected the downstream homeowners from a significant amount of floodwater which would have passed naturally downstream in the absence of the dams. Green's testimony equating the PMF and the 100-year frequency storm/flood is difficult to square with the Pennsylvania Code, which includes distinct definitions for those concepts. The Code definition of PMF focuses upon what amounts to a theoretical but plausible worst case scenario involving the "most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in an area." 25 Pa.Code § 105.1. But the Code defines 100-year frequency flood differently: "100-year frequency flood The flood magnitude expected to be equaled or exceeded on the average of once in 100 years; it may also be expressed as the flood having a 1.0% chance of being equaled or exceeded in a given year." Id. Appellant's meteorological expert, Gregory Forbes, testified that the PMF and 100-year flood/storm precipitation figures are calculated using different methods. According to Forbes, the PMF for Luzerne County is 23.87 inches; thus, to pass half the PMF, the spillways/dams would have to be able to accommodate over 11 inches of rain in a 24-hour period. Forbes' testimony was corroborated by appellant's engineering expert, Gordon Warren. In addition, the engineering reports prepared for the Army Corps of Engineers recognized PMF figures in the 23 inch-plus range for these dams. Since the rainfall from Hurricane Gloria was only 6.5 inches, far less than half of the PMF, appellant's evidence suggested that the dams were functionally adequate to pass the water discharged by Gloria. In addition, and consistently with this formula, defense witnesses testified that the dams did not overtop. The distinction between the PMF and the 100-year frequency flood is not merely academic, nor is it necessarily a credibility matter which collapses into the trial court's factual findings. The distinction is pertinent under the Pennsylvania Code which classifies dams according to (1) size ("class") and (2) hazard potential in the event of an operational or structural failure ("category"), see 25 Pa.Code § 105.91,[7] and the resulting joint classification then determines the governing "flood design criteria." Id. § 105.98. That flood design criteria, in turn, speaks in terms which specifically distinguish between the PMF and a 100-

year frequency flood: § 105.98. Design flood criteria.

*596 (a) The discharge capacity or storage capacity, or both, shall be capable of safely accommodating the recommended design flood for the size and hazard potential classification of the dam as determined by § 105.91 (relating to classification of dams and reservoirs). The design flood is intended to represent the largest flood that need be considered in the evaluation of a given project. When a range of design flood is indicated, the magnitude that most closely relates to the size and hazard potential shall be selected. Design flood criteria shall be as indicated in the following table:

Size and Hazard Potential Classification Design Flood

A-1, A-2, B-1 PMF

A-3, B-2, C-1 ½ PMF to PMF B-3, C-2 100 year to ½ PMF C-3 50 year to 100 year frequency

Thus, a C-1 class dam such as Springbrook Intake, for example, must be designed to accommodate from one-half to the full PMF, which is precisely the standard adverted to in the reports prepared for the Army Corps of Engineers for that dam.[8] Larger dams of equal or slightly less hazard potential, however, must be capable of accommodating the entire PMF, while dams with a lower hazard classification need only accommodate floods measured by the 100-year frequency flood to ½ of the PMF, or the 50 year- to 100-year frequency flood. It is plain from this escalating risk regulatory framework that the 100-year frequency flood number is substantially lower than one-half of the PMF. The trial court apparently disregarded the regulatory structure as well as appellant's evidence, as it made a specific finding that the 6.5 inches of rain dropped by Hurricane Gloria exceeded 1/2 of the PMF. The court made no specific finding concerning the disputed point of whether any of the dams overtopped. The only evidence concerning the status of the reservoirs/dams on the day of the hurricane came from John Powell, whom appellant employed as a caretaker for the reservoirs. Part of Powell's job included taking daily spillway measurements. On September 27, 1985, Powell worked from 6 a.m. to 2:30 p.m., during which time he took spillway measurements at the lower three dams. Powell's last spillway measurement that day occurred before 10 a.m.; the next spillway measurements were not taken until the following morning. Appellees' homes were flooded in the interim, at approximately 3:00-3:30 p.m. on September 27th. It was also undisputed that, because appellant did not deem there to be a dam hazard emergency, it did not activate its emergency action plan and/or issue any warning to local authorities or downstream property owners concerning a potential dam failure/flood hazard facing them, nor did appellant attempt to draw down the water level in the reservoirs in anticipation of the storm. The trial court issued findings in which it concluded that, although "the primary purpose for the construction and subsequent operation" of these dams was to collect and supply water, "[r]egardless of *597 their purpose, [appellant] had an obligation to design, operate and maintain the [reservoirs/dams] so as to avoid flooding to properties located below...." Decree Nisi (Findings of Fact), 5-6, ¶¶ 37-38. The court further found that appellant had a duty to (1) "operate and maintain its reservoirs/dams in a safe fashion," which included providing adequate spillways; (2)

warn the general public and appellees of "any hazards that may be associated with the operation of their reservoirs/dams;" (3) abide by applicable statutory and regulatory provisions under the Dam Safety and Encroachments Act, 32 P.S. § 693.1 et seq. (the "Dam Safety Act" or the "Act"); and (4) "operate and maintain its reservoirs/dams so as to protect the property" of downstream individuals. Decree Nisi (Conclusions of Law), 13-14, ¶¶ 3-6. The court concluded that appellant negligently failed to operate and maintain its facilities in accordance with the terms of its permits, the Act, and administrative regulations; and that this failure was the proximate legal cause of the flooding of appellees' properties. Id. at 14, ¶¶ 7-11. The court determined that appellant was "liable ... on the legal theory of negligence" for the harm appellees suffered and appellees were entitled to compensation for their real and personal property losses. Id. at 15, ¶¶ 12-14.[9] In an opinion filed after appellant appealed the final decree to Superior Court, the trial court reiterated its legal conclusions that appellant had a duty to maintain its reservoirs/dams in a safe condition and to take necessary steps to protect downstream property owners from the floodwaters of a storm such as Hurricane Gloria. This duty included maintaining adequate spillways, drawing down the level of stored water in anticipation of "heavy precipitation," warning property owners whose property is "threatened" by its reservoirs/dams, and developing and following an emergency action plan for dam hazard emergencies. Slip op. at 6. The trial court stated that appellant "should have reasonably found that [sic] Hurricane Gloria and the consequent inadequate hydraulic capacity of Springbrook [Intake] to constitute an imminent threat to life and property and found that a dam hazard emergency existed." Id. at 7-8. Further, "[b]y allowing the spillways on their [sic] reservoirs/dams to become inadequate, by not drawing down the water supplies in [its] reservoirs/dams, and by not instituting or following [its] emergency action plan, [appellant] breached [its] legal duty." Id. at 9. This breach of duty, according to the trial court, was a "substantial factual cause" of the flooding of Springbrook Creek and appellees' attendant losses. Id. Appellant appealed and the Superior Court ultimately affirmed the judgment below.[10] On the question of appellant's duty, the panel noted that appellant's reservoirs/ dams are regulated by the Dam Safety Act specifically, Section 693.13. That Section reads, in pertinent part, as follows: § 693.13. Duties of Owners (a) The owner of any dam, water obstruction or encroachment shall have the legal duty to:

*598 (1) monitor, operate and maintain the facility in a safe condition in accordance with the regulations, terms and conditions of permits, approved operating plans and orders of the department issued pursuant to this act;

* * *

(3) immediately notify the department and responsible authorities in downstream communities of any condition which threatens the safety of the facility, and take all necessary actions to protect life and property, including any action required under an emergency plan or department order issued pursuant to this act. ...

32 P.S. § 693.13(a)(1), (a)(3). The panel construed the trial court's factual determinations as

including a finding that appellant had violated Section 693.13 and its accompanying regulations "by failing to maintain adequate spillways, failing to draw down the water levels of its dams, failing to follow its emergency action plan, and failing to warn individuals and municipalities whose property was at risk of flooding." 765 A.2d at 302. The panel concluded that these findings were supported by the record. However, on the question of duty, the panel's approach was very different from that of the trial court. The panel sua sponte determined that the violation of Section 693.13 found by the trial court "constituted negligence per se." Id. In rendering this interpretation of the Dam Safety Act, the panel rejected the decision of the U.S. Court of Appeals for the Third Circuit in *Beaver Valley Power Co. v. National Eng'g & Contracting Co.*, 883 F.2d 1210 (3rd Cir.1989). In the panel's view, a per se approach was appropriate "because we find it simpler to regard the Act as the absolute standard of conduct governing dam owners rather than to ignore the statute and create a parallel, abstract, 'reasonable person' standard." 765 A.2d at 303. Applying its per se approach, the panel deemed it immaterial that appellant's facilities were permitted and that its dams "did not breach, leak or fail;" rather, the material fact was that the dams "overflowed." The panel also agreed with the trial court that appellant should have responded to Hurricane Gloria by declaring a "dam hazard emergency," activating its emergency action plan, and warning downstream homeowners. The panel rejected appellant's argument that the "safety" concerns addressed by the Act and the accompanying regulatory structure have to do with "the structural integrity of the dam." In the panel's view, the safety referred to in the Act was the security of downstream residents; therefore, appellant "had a duty to warn people downstream of the dangers posed by Hurricane Gloria," even if that danger was totally unrelated to the prospect of a structural dam failure. The panel also concluded that appellant had "a duty to draw down its water levels" because the relevant regulation requires such action in the event of a dam hazard emergency. Id. at 303-04. The panel next rejected appellant's causation argument i.e., the argument that the sole cause of damages here was the water dropped by the hurricane since, inter alia, in the total absence of the dams more floodwater would have proceeded down this watershed and left even more devastation in its wake. The panel rejected this argument, finding that the evidence showed both an Act of God (the hurricane) and negligence by virtue of appellant's failure to comply with the Dam Safety Act. Id. at 304. On this appeal, appellant argues, as it did below, that the safety requirements imposed by the Dam Safety Act relate solely to structural stability and do not *599 impose any greater collateral duty in negligence beyond what might be expected under common law. Appellant further argues that the term "dam hazard emergency" as defined in the governing administrative regulations likewise connects the emergency directly to the stability of the dam. The Code indeed defines "dam hazard emergency" in such terms: "a condition which the Department, permittee or owner of the dam reasonably finds constitutes an imminent threat to life or property above or below a dam, whether arising from the condition of the dam and appurtenant works or extraordinary natural conditions, affecting the safety and stability of the dam, including, but not limited to, flood, earthquake, fire and ice jam." 25 Pa.Code § 105.135 (emphasis supplied).

Appellant submits that it does not owe a statutory or regulatory duty to downstream homeowners to prevent or mitigate flooding caused by unpredictable natural phenomena such as hurricanes, rainstorms and snow melts, since its dams are permitted as water supply reservoirs and not as flood control reservoirs. Appellant further argues that the expansive duty imposed upon it by the courts below amounts to a "radical and unacceptable standard of absolute liability" for the owners of water supply reservoirs. Under this new duty, "[r]eservoir owners and operators will be held liable even when their facilities hold fast, experience no structural failure, add not a single drop to Nature's flood waters, and, in fact, reduce the downstream flow of those waters." Brief for Appellant, 19. Appellant submits that the lower courts overlooked the bedrock principle of negligence law that conduct is only negligent if the harmful consequences could have been reasonably foreseen and prevented by the exercise of reasonable care. Here, appellant submits, Hurricane Gloria's path and severity were unforeseeable, unpredictable and unexpected based upon the NWS forecasts. Appellant also argues that, although the Dam Safety Act certainly provides specific guidance relating to the particular hazards posed by dams, duties arising from the Act should be viewed in conformity with common law principles of liability involving "water jurisprudence." Appellant notes that, under well-settled Pennsylvania law, the owner of upper land is not a guarantor against damage caused by surface water run-off through a natural course to lower land; rather, the upstream landowner is liable for such water run-off only if he has diverted the water from its natural channel by artificial means, or unreasonably or unnecessarily increased the quantity of water or changed the quality of the water discharged downstream. *Id.* at 20-21, citing *Lucas v. Ford*, 363 Pa. 153, 69 A.2d 114 (1949); *LaForm v. Bethlehem Twp.*, 346 Pa.Super. 512, 499 A.2d 1373 (1985); *Piekarski v. Club Overlook Estates, Inc.*, 281 Pa.Super. 162, 421 A.2d 1198 (1980). Appellant further notes that other jurisdictions take precisely this approach to the question of the duty of dam owners, recognizing that the only obligation is not to worsen conditions downstream beyond what would have occurred in the absence of the dam. Brief for Appellant, 19-21 & n. 5 (collecting cases). Appellant submits that the same principle obviously undergirds the Dam Safety Act and its accompanying regulations, since they "punish and protect against dam failures: events which would unreasonably increase the quantity or quality of the natural water falling upon or passing through a dam owner's land." Reply Brief, 12. In the case sub judice, appellant argues, its reservoirs/dams did not concentrate, channel or increase the force of the waters naturally produced by Hurricane Gloria; to the contrary, appellant argues, those reservoirs protected appellees *600 by preventing some of the hurricane's water from passing downstream. Appellees counter that appellant is liable irrespective of the fact that its dams did not fail structurally. Appellees take an expansive view of the duties that dam-owners owe, as a matter of law, to downstream homeowners. Appellees argue that, from a design standpoint, there is no difference between water supply reservoirs/dams and flood control dams: each must be engineered so as to protect downstream landowners. Thus, even if a dam retains its structural integrity, as these dams did, a dam owner is liable in negligence if the dam is not designed to hold, and/or if it

does not in fact hold, waters which might accompany a storm of the magnitude of Hurricane Gloria. Appellees further argue that the harm that these dams could cause by failing to stem the flow of the waters from a storm such as Hurricane Gloria was foreseeable because the engineering reports provided to the Army Corps of Engineers highlighted the inadequacy of the spillway capacities, and yet appellant failed to remedy those deficiencies. Appellees also adopt Superior Court's view of appellant's duty to ensure "safety" under the Dam Safety Act. Appellees look to the general definition of safety in the Act, which provides that, unless the context clearly indicates otherwise, "safety" means "[s]ecurity from the risk or threat of significant loss or injury to life, health, property and the environment." Since property loss occurred here, and would not have occurred if the dams had not overtopped or flooded, appellees argue, the dams were "unsafe." Thus, from appellees' perspective, a dam is "unsafe" and "fails" whenever it fails to protect downstream homeowners from flooding. This Court also has the benefit of an amicus brief filed in support of appellant by the Pennsylvania Department of Environmental Protection (DEP), the successor agency to DER, and the agency that administers the Dam Safety Act.[11] DEP argues that Superior Court's interpretation of the Act is contrary to the manner in which DEP has administered it. DEP advises that it did not deem appellant's spillways, as modified in response to the Army Corps of Engineer reports, to be seriously inadequate since they could discharge over ½ of the PMF. Because the spillways were adequate to handle this storm (which DEP says produced only 23% of the PMF) and because the storm posed no threat to the physical safety of the dams and reservoirs, DEP argues that no "dam hazard emergency" arose, and therefore, appellant had no duty to warn, much less a duty to draw down the water which is stored in the reservoirs for the benefit of the public. DEP recognizes that a natural condition such as a hurricane could represent a dam emergency, but only if it affected the stability of the dam; a hurricane is not a per se dam emergency. The fact that a "flood emergency" is posed by a storm, DEP notes, does not equate to a "dam hazard emergency." In DEP's view a public supply reservoir/dam which is structurally safe, as these dams were, is not in violation of the Act. Moreover, DEP takes issue with the notion of a duty to draw-down a water supply reservoir in advance of a storm. Such a requirement is impractical, DEP notes, because it takes days to draw down a reservoir, the course and severity of storms and hurricanes are unpredictable, *601 and an unnecessary drawdown may itself cause a public safety hazard an insufficient water supply. Preliminarily, we note that we disagree with Superior Court's sua sponte holding that violations of Section 693.13 of the Act should be deemed proof of negligence per se. Assuming that such a per se negligence holding is warranted in an appropriate case, logically, the statute at issue would have to be so specific as to leave little question that a person or entity found in violation of it deviated from a reasonable standard of care. As the Third Circuit noted in *Beaver Valley Power Co. v. National Engineering & Contracting Co.*, 883 F.2d 1210 (3rd Cir.1989): For a legislative enactment to be considered as "fixing a standard for all members of the community, from which it is negligence to deviate," the act must first of all "provide[]" that under certain circumstances particular acts shall or shall not be

done...." W. Keeton, D. Dobbs, R. Keeton, D. Owen, Prosser & Keeton on the Law of Torts § 36 at 220 (1984). Id. at 1221. Many statutes provide very general statements of what constitutes compliance or deviation, while others are quite specific. The Motor Vehicle Code provides a useful example of the distinction. Section 3361 of the Motor Vehicle Code contains the very general requirement that operators of motor vehicles drive at a "reasonable and prudent" speed: No person shall drive a vehicle at a speed greater than is reasonable and prudent under the conditions and having regard to the actual and potential hazards then existing, nor at a speed greater than will permit the driver to bring his vehicle to a stop within the assured clear distance ahead. Consistent with the foregoing, every person shall drive at a safe and appropriate speed when approaching and crossing an intersection or railroad grade crossing, when approaching and going around curve, when approaching a hill crest, when traveling upon any narrow or winding roadway and when special hazards exist with respect to pedestrians or other traffic or by reason of weather or highway conditions. 75 Pa.C.S. § 3361. What constitutes a reasonable and prudent speed is unspecified; since the statute essentially sets forth a traditional reasonable man standard, it would be impracticable to base a finding of negligence per se upon this provision. The very next section of the Code, however, sets forth the specific numeric limits on vehicle speed which every Pennsylvania driver must obey or be deemed at fault. Id. § 3362. Section 3362 speaks in absolutes; there is no room for the flexibility of the reasonable man standard. Exceeding the designated limit is, by statutory definition, unreasonable. A violation of Section 693.13 of the Dam Safety Act is not an appropriate basis for a finding of per se negligence. In this regard, we find persuasive, where Superior Court did not, the analysis of the Third Circuit in *Beaver Valley*. In that case, the defendant was constructing a bridge and to that end built cofferdams, which are temporary structures used in bridge-building to "dewater" the area around piers under construction and for use as a working platform. The displacement of water by the cofferdams caused the water level in the upstream plaintiff power company's hydroelectric dam to rise. Because the power company generated electricity when water from an upper pool above the dam fell to a lower pool in the dam itself, the artificially higher water level in the lower pool decreased the distance between the two pools, thereby reducing the amount of power generated. The plaintiff power *602 company therefore sued the builder of the downstream bridge for losses sustained as the result of a decrease in the dam's capacity to produce electricity. The power company first argued that the bridge owner was negligent per se because it had built and maintained the cofferdams with an expired, and therefore invalid, permit in violation of Section 693.13 of the Dam Safety Act. The Third Circuit, which was sitting in diversity and thus was tasked to anticipate how this Court might rule on the questions of Pennsylvania law presented, rejected this argument, finding that licensing and permit requirements do not usually create per se rules of civil liability. 883 F.2d at 1221-22. The power company next claimed that negligence per se should be found because the bridge owner violated Sections 693.13(a)(1) and (3) of the Act, the precise sections involved in this case. The Third Circuit deemed it unlikely that this Court would find that these provisions would support a finding

of negligence per se due to the lack of specificity in the conduct required: These provisions do not create standards of care in any more specific sense than the law of negligence in general. Unlike those legislative enactments whose violation is considered to constitute negligence per se, compare *Miller v. Hurst*, 302 Pa.Super. 235, 448 A.2d 614, 618 (1982) (violation of law requiring dog to be kept on leash constitutes negligence per se), they do not describe particular acts that should or should not be done. The general exhortations to maintain the facility in a "safe" condition and to take "necessary" action to protect property at most tell the permit holder to act as the reasonable person would. They do not provide guidance as to a legislative judgment that the failure to engage in certain conduct constitutes negligence; rather, they raise questions much like the question of whether particular conduct should be considered negligent: whether a person has maintained a dam in a "safe" condition and whether a person took "necessary" action. Accordingly, we do not think the Pennsylvania Supreme Court would deem these provisions suitable for adoption as a per se standard of negligence. 883 F.2d at 1222. We concur with the Third Circuit's conclusion that these provisions in Section 693.13 are not sufficiently specific such that a violation should be deemed to give rise to a finding of negligence per se. Notwithstanding that it might be "simpler" to conclude otherwise as Superior Court did, the fact remains that Section 693.13 sets forth a general standard of conduct which simply requires the tried and true application of law to fact. As the Third Circuit correctly recognized, the statute essentially expresses the familiar and flexible reasonable man standard and, as such, it does not support a per se negligence shortcut. The remaining and more difficult question is whether the trial court (which did not operate on an assumption of per se negligence) properly found that appellant was negligent by applying a traditional reasonable person standard, in light of the duties imposed on dam owners under the Dam Safety Act and/or the common law. We hold that the evidence here was insufficient as a matter of law to prove that appellant was negligent. "A cause of action in negligence requires allegations that establish the breach of a legally recognized duty or obligation that is causally connected to damages suffered by the complainant." *Sharpe v. St. Luke's Hosp.*, 573 Pa. 90, 821 A.2d 1215, 1218 (2003). This Court has noted that, "[t]he primary element in any negligence cause of action is that the defendant owes a duty of care to the plaintiff." *603 *Althaus ex rel. Althaus v. Cohen*, 562 Pa. 547, 756 A.2d 1166, 1168 (2000). The *Althaus* Court further summarized the traditional considerations of public policy involved in any assessment of the existence of a duty of care as follows: "In determining the existence of a duty of care, it must be remembered that the concept of duty amounts to no more than 'the sum total of those considerations of policy which led the law to say that the particular plaintiff is entitled to protection' from the harm suffered.... To give it any greater mystique would unduly hamper our system of jurisprudence in adjusting to the changing times. The late Dean Prosser expressed this view as follows: These are shifting sands, and no fit foundation. There is a duty if the court says there is a duty; the law, like the Constitution, is what we make it. Duty is only a word with which we state our conclusion that there is or is not to be liability; it necessarily begs the essential

question. When we find a duty, breach and damage, everything has been said. The word serves a useful purpose in directing attention to the obligation to be imposed upon the defendant, rather than the causal sequence of events; beyond that it serves none. In the decision whether or not there is a duty, many factors interplay: The hand of history, our ideas of morals and justice, the convenience of administration of the rule, and our social ideas as to where the loss should fall. In the end the court will decide whether there is a duty on the basis of the mores of the community, 'always keeping in mind the fact that we endeavor to make a rule in each case that will be practical and in keeping with the general understanding of mankind.' [Prosser, *Palsgraf Revisited*, 52 Mich. L. Rev. 1, 14-15 (1953).]" 756 A.2d at 1168-69, quoting *Sinn v. Burd*, 486 Pa. 146, 404 A.2d 672, 681 (1979) (citation and footnote from *Sinn* omitted). Accord *Sharpe*, 821 A.2d at 1219. The question of whether a duty exists is a legal one "assigned in the first instance to the trial court and subject to plenary appellate review." *Id.* Like DEP, we do not view Section 693.13 and the accompanying regulations as imposing a general duty of flood control upon dam owners for the purpose of protecting downstream homeowners. Although it is true that all dams control flooding if the reservoir created by the dam is not filled to capacity when a storm hits, that fact does not mean that the owner of a water reservoir facility has assumed the duty to become a de facto insurer of downstream property owners against the course of floodwaters generated by forces unrelated to the structural integrity of the dam. The statutory and regulatory framework at issue is directed to the safety and integrity of these manmade facilities themselves which, in turn, ensures that they do not cause extraordinary harm to downstream homeowners through structural failure. That such is the purpose of the legislation is apparent from its plain language. Dam owners are duty-bound to monitor, operate and maintain the facility in a safe condition. 32 P.S. § 691.13(a)(1) (emphasis supplied). Their duty to notify and to "take all necessary actions to protect life and property" likewise is tied into situations where a condition arises "which threatens the safety of the facility." *Id.* § 693.13(a)(3) (emphasis supplied). The regulatory definition of "dam hazard emergency" is equally explicit: although the triggering condition may be external to the dam ("condition of the dam and appurtenant works or extraordinary *604 natural conditions ... including, but not limited to, flood, earthquake, fire and ice jam"), it must be one which thereby "affect[s] the safety and stability of the dam." 25 Pa.Code § 105.135 (emphasis supplied). Both Superior Court and appellee view appellant's duty of "safety" to be outwardly-oriented: i.e., the primary duty is not to assure the structural safety of the dam, but rather to ensure the safety of downstream property owners. Indeed, Superior Court went so extraordinarily far as to find that, "Appellant's duty to warn downstream property owners is triggered by any event which threatens life, health, property or the environment, regardless of whether the integrity of the dam is implicated." 765 A.2d at 304. In forwarding this broad construction of appellant's duty, Superior Court focused upon the Act's general definitional section which defines "safety" as meaning "[s]ecurity from the risk or threat of significant loss of injury to life, health, property and the environment." 32 P.S. § 693.3. However, the panel overlooked the fact that that definitional section begins with the caveat that this

particular "meaning" of the term applies "unless the context clearly indicates otherwise." *Id.* The context of the governing provisions at issue here speaks not to the integrity of downstream homeowners and their property, but explicitly to "the safety of the facility/dam." Of course, a natural byproduct of the dams remaining structurally sound is that the persons and property of downstream homeowners are protected as well. But, that is a far cry from finding a legislative intent to impose a statutory duty upon dam owners not only to protect downstream property owners against foreseeable dangers resulting from dam failure, but also to take protective actions against "any event which threatens life, health, property or the environment." The Act may fairly be said to impose a duty upon dam owners to protect the public from foreseeable harms that would result from the failure of the facility irrespective of what might occasion that danger of failure. To read into the narrow and specific provisions of the Act some greater duty to take affirmative action to protect against dangers arising from some other agency, however, is unwarranted.[12] The duty imposed on dam owners to ensure the integrity of their dams is no small matter in and of itself. The regulatory structure understandably distinguishes between facilities depending upon their size and volume and their prospective danger to the public, and modulates the level of obligation accordingly. For example, the riskier the dam is in the event of failure, the greater is the regulatory requirement regarding spillways. It is obvious both from the testimony below and as a matter of common sense that the primary safety purpose of a spillway is to protect the integrity of the dam structure. If the volume and speed of water entering a reservoir were to exceed the capacity of the spillway to modulate the volume of water in the reservoir, and then to a point where the dam itself exceeded its capacity, there is a risk of overtopping and concomitant erosion, leakage, or bursting. If a dam leaks or bursts due to negligent design, maintenance or operation, the resulting direct damage to downstream homeowners is not due to an Act of God, but to the sudden release of that which *605 man determined to artificially store and concentrate. By undertaking to change the natural pooling and dispersal along the waterway, the dam's owner necessarily assumes a duty respecting the integrity of the dam. But, the owner does not thereby undertake to insure all downstream homeowners against the prospect of floods having nothing to do with the integrity of the dam, and the legislation does not oblige him to do so. Appellees' own theory of liability highlights the impracticality of the multifaceted duties they would have the courts impose upon dam owners. Appellees make much of the fact that the engineering reports provided to the Army Corps of Engineers highlighted the deficiency in the capacity of the spillways of these dams to disperse floodwaters from the most severe probable storm. Appellant aptly rejoins, however, that if larger spillways of greater discharge capacity had passed on more water into the watershed than these did, the danger to appellees would have increased. In short, the primary danger which a greater spillway capacity guards against during the course of a storm is the failure of the dam which is the single most catastrophic event at issue, and the event with which the Army Corps was concerned. But, at least in an instance where a dam does not fail, as was the case here, a greater spillway capacity and discharge would have presented a greater danger of flooding to downstream

homeowners. The duty that appellant owed to downstream homeowners and to the public generally was to design, maintain and operate its dams in a fashion that ensured that their structural integrity would be maintained safely even in a storm of the predictable (if rare) intensity of Hurricane Gloria. It was undisputed that appellant's dams did not fail: they did not burst or leak and, indeed, to the extent that two of the reservoirs were well below capacity at the time the storm was raging (in a period when the region had been in the midst of a drought), those reservoirs acted unintentionally as flood control facilities and thereby protected downstream homeowners from a certain amount of Gloria's waters. Because the dams did not fail, and the damages which appellees sustained were a result of the natural effect of the storm, appellant did not breach any legal duty to appellees. The damages that appellees suffered resulted not from a rush of water released through the breach or failure of a dam, but from the natural effect of a storm of this magnitude inundating this sort of severe downhill watershed, where landowners had unwittingly and tragically built their homes in the natural floodplain of the watershed. We note that our understanding of appellant's duty to appellees, both under the statute and under common law, comports with the traditional approach to the respective rights and duties of landowners when water run-off is at issue. As this Court noted over half a century ago, summarizing what was already well-settled law: The owner of upper land has the right to have surface waters flowing on or over his land discharged through a natural water course onto the land of another, but he may not cut an artificial channel to divert that water. ... He may make proper and profitable use of his land even though such use may result in some change in quality or quantity of the water flowing to the lower land. ... If that change is not unreasonable in relation to the use, any loss resulting to the owner of the lower land is *damnum absque injuria*. ... In that connection, the upper owner may lay artificial drains in his land provided they do not divert the water from its natural course or *606 cause unnecessary injury to the lower owner. ... From those rules it is clear that only where the water is diverted from its natural channel or where it is unreasonably or unnecessarily changed in quantity or quality has the lower owner received a legal injury. *Lucas v. Ford*, 363 Pa. 153, 69 A.2d 114, 116 (1949) (citations omitted). In the case sub judice, the floodwaters that inundated appellees' properties were not channeled or concentrated by appellant and diverted or dumped into the watershed. The waters came from Hurricane Gloria. The dams held back those floodwaters to the maximum of their capacities and it was only the natural flow of excess water produced by the storm which proceeded down through the natural watercourse and caused the damage to appellees' properties. We have not lost sight of the sudden and severe tragedy which has befallen appellees as a result of this extreme weather event. Responsibility for that tragedy, however, cannot lawfully be assigned to appellant, whose dams neither failed nor caused the damage that appellees suffered. Accordingly, the judgment below is reversed and judgment is entered in favor of appellant. Former Chief Justice ZAPPALA did not participate in the decision of this case. Justice NEWMAN files a concurring opinion. Justice NEWMAN concurring. I agree with the Majority that the standard applicable to the instant matter is the reasonable person standard rather than negligence per se. As articulated, the statute is

not drafted so that a reasonable person can discern what conduct is prohibited. Next, I agree that PG Energy (Appellant) had no duty to draw down the water in the reservoirs prior to the onslaught from Hurricane Gloria. This was not a flood-control dam, but a water supply reservoir and there is no support for an argument that every dam owner has a duty to institute flood control measures in times of heavy precipitation. Finally, I also agree that the Dam Safety and Encroachments Act, Act of November 26, 1978, P.L. 1375, as amended, 32 P.S. §§ 693.1 to 693.27, is focused primarily on mechanisms for maintaining the integrity of the dam. Of course, by maintaining the integrity of the dam, the downstream watershed is protected from the flooding waters contained within the dam, but not additional waters. I write separately because, I believe that Appellant assumed a duty to warn when it drafted and adopted its "Emergency Warning System and Operation Plans, Spring Brook Intake" in 1982, and that it should have implemented this plan on September 27, 1985. Initially, I am troubled by the fact that the potential for a dam hazard is being assessed after the conclusion of the event rather than before or during the event. The Majority Opinion, the Department of Environmental Protection (DEP), and Appellant all stress that the dams did not fail, did not burst or leak, and held back the floodwaters to the maximum of their capacities. This post-event perspective is not the appropriate timeframe in which to assess whether an Emergency Action Plan (EAP) should be implemented. Implementation of the EAP should have focused on the contents of the plan and whether a reasonable person would have deemed conditions existing to call for its implementation. Although a hurricane is not a per se hazard, it can pose a dam safety hazard if the storm has force and intensity. I believe that Hurricane Gloria, with its torrential rains and flooding, had the potential *607 to threaten dam stability and that, regardless of an after-the-fact assessment that says nothing happened, it is the potential threat that triggers the implementation of the Emergency Action Plan. In the instant matter, I believe that a potential threat existed. Even the Majority acknowledges the importance of adequate spillway design, particularly where the spillways are marginal or meet only the minimum specifications. The Majority inexplicably recognizes the danger to a dam when flooding conditions exist, only to conclude that because nothing happened, implementation of the EAP was unnecessary. The Majority states: [T]he primary safety purpose of a spillway is to protect the integrity of the dam structure. If the volume and speed of water entering a reservoir were to exceed the capacity of the spillway to modulate the volume of water in the reservoir, and then to a point where the dam itself exceeded its capacity, there is a risk of overtopping and concomitant erosion, leakage, or bursting. If a dam leaks or bursts due to negligent design, maintenance or operation, the resulting direct damage to downstream homeowners is not due to an Act of God, but to the sudden release of that which man determined to artificially store and concentrate. (Op. at 604-05.) The Majority continues that, "In short, the primary danger which a greater spillway capacity guards against during the course of a storm is the failure of the dam which is the single most catastrophic event at issue, and the event with which the Army Corps was concerned." (Op. at 605.) I believe that Hurricane Gloria presented just this potential scenario in at least the early hours of the storm and

that Appellant should have activated its plan and warned downstream residents that flooding was possible. A review of the provisions of the EAP for Spring Brook demonstrates that the EAP should have been implemented. Specifically, the EAP ties a dam hazard emergency to the level of the water passing through the spillway. The initial action in the event of heavy precipitation is the dispatch of the caretaker to observe and report on reservoir levels. The EAP indicates that dam surveillance will be maintained on a twenty-four-hour basis until a company officer declares that the event has concluded. Appellant never monitored the spillway discharge at the specified locations and, without continuous surveillance, Appellant was without information as to the safety and stability of the dam. The EAP states that a moderate danger of dam failure occurs when the spillway discharge is at 50% of capacity or rapidly approaching 50%. It notes that, "at 50% of spillway capacity, the reservoir level is at 6.3 feet over the spillway crest or 3.7 feet below the top of the dam." (Reproduced Record (R.R.) at 865a.) At this point, the plan calls for assessment of the risk of dam failure by Appellant's employees and preparations for possible evacuation of the downstream watershed. The next category of dam hazard is titled "Increasing Danger." Increasing danger exists at 75% of spillway capacity, with the forecast for continued heavy rainfall. At 75% of spillway capacity, the reservoir level is at 8.3 feet above the spillway crest or 1.7 feet below the top of the dam. At this point, evacuation procedures are implemented. The actual passage reads: In the event the spillway discharge has reached 75% of capacity and weather information indicates that heavy rainfall will continue and/or surveillance at the site or at upstream reservoirs indicates a potential hazard other than overtopping, *608 evacuation procedures shall be implemented. This passage can be read two other ways: In the event the spillway discharge has reached 75% of capacity and weather information indicates that heavy rainfall will continue ... evacuation procedures shall be implemented. OR In the event ... surveillance at the site or at upstream reservoirs indicates a potential hazard other than overtopping, evacuation procedures shall be implemented. (R.R. at 869a). It is not disputed that the spillway discharge reached at least 75% of capacity, if not 100%, while there was still heavy rain. Although there is no recognized duty to warn in Pennsylvania, I have concluded that a duty to warn was voluntarily assumed in this case, even though not statutorily imposed, when PG Energy drafted its EAP. Appellant, when it specified a series of alerts based on the level of spillway discharge, was the one entity in the best position to know how much rainfall and what circumstances would result in downstream flooding. However, because I do not believe that the failure to warn was the proximate cause of Appellees' property loss, I agree with the Majority that Appellant was not liable for the damage to the property of Appellees. The extent of the flooding was so great from the torrential downpours that warnings given by Appellant would not have averted the damage suffered by Appellees. The occurrence of a major storm event will cause a dam to overtop because, due to the limitations of its spillway, the level of the water within the impound area will rise at a rate greater than the dam's capacity to pass that water over that spillway. Further, the corresponding pressure of a colossal volume of water threatens the very stability of the dam. We forever remember that the unique risks

posed by dam structures, in combination with torrential rains, produced the devastating failure of an earthen dam on South Fork Creek outside of Johnstown, Pennsylvania on May 31, 1889. The resulting torrent swept away more than two thousand lives. Although the area had often flooded, the dam had always held. While we have designed many of our modern methods to ensure that there is no repeat performance of this tragedy, this goal is entirely dependent on the quality of construction, frequency of inspections, promptness of repair, and the presence and proper implementation of emergency action plans. Failure of any one of these poses an unnecessary and unacceptable risk to a downstream watershed. Therefore, I believe that Appellant, pursuant to the specific provisions of the Emergency Action Plan that it drafted, assumed a duty to warn those downstream when water levels triggered the actions mandated by that plan.

NOTES

[1] The dams/reservoirs were subsequently acquired by the Pennsylvania-American Water Company, which is not a party to this appeal, but which has filed a brief as Amicus Curiae in support of appellant.

[2] Appellant also raises issues related to the calculation of compensatory damages and delay damages, which we will not reach given our disposition of the controlling liability issue.

[3] A spillway is defined as "[a] device which safely conveys the design flood of a dam without endangering its safety or integrity." 25 Pa.Code § 105.1. The spillway is built at a height below the height of the dam and functions by allowing the reservoir to pass on excess rain or natural water runoff, thus protecting the dam against overload and failure (in the sense of a breach of the structure), while maintaining the optimum water capacity.

[4] The evidence below revealed that there are significant design and functional differences between flood control dams and water storage dams. A flood control dam is typically maintained with little or no water in the reservoir so as to maximize the ability to protect lower elevations from heavy rains and potential flooding. In contrast, a water supply reservoir is usually maintained as close to normal capacity (spillway height) as nature provides, so as to protect against periods of drought.

[5] Although the reports to the Army Corps of Engineers did not advert to the Pennsylvania Code definition of PMF, the Code definition is consistent with the usage reflected in the reports and in the testimony at trial.

[6] The "high hazard" designation was unrelated to any findings regarding the adequacy of the spillways, but rather was a function of their mere location upstream from a populated area. This designation is consistent with the approach under Pennsylvania regulatory law, which designates as high hazard a dam which is "so located as to endanger populated areas downstream by its failure." 25 Pa.Code § 105.1.

[7] A Class A dam is one which either has an impoundment storage area of 50,000 or more acre feet, or is 100 or more feet in dam height; a Class B dam is one which either has an impoundment storage area of 1,000 to 50,000 acre feet or is 40 to 100 feet in dam height; and a Class C dam is

one which either has an impoundment storage area of up to 1000 acre feet, or is equal to or less than 40 feet in dam height. 25 Pa.Code § 105.91. A Category 1 dam is one where the potential loss of life from failure is substantial and/or the potential economic loss is excessive; a Category 2 dam is one where the potential loss of life is "few" and/or the potential economic loss is "appreciable;" a Category 3 dam is one where no loss of life is expected and the potential economic loss is minimal. Id.

[8] In the testimony below, it appeared to be undisputed that appellant's dams were required to pass between ½ PMF to PMF.

[9] Following an initial delay damages remand by the Superior Court, the trial court ultimately awarded damages to appellees in the aggregate of \$696,781.58, including delay damages.

[10] The Superior Court initially rejected appellant's appeal in a published opinion, except for the issue of delay damages, which it remanded to the trial court for initial resolution. *Shamnoski v. PG Energy*, 765 A.2d 297 (Pa.Super.2000). Following that remand, Superior Court issued a memorandum decision on March 7, 2001, affirming the final decree below.

[11] Appellant joined DEP as an additional defendant at trial but, at the completion of trial, DEP's motion for nonsuit was granted.

[12] We do not dispute that it is within the power of the General Assembly to require more of dam owners, given the inherent flood control purpose that dams could be required to serve. But, that is not what the current statutory structure requires and we will not read into it a duty which does not there exist.

CASTILLE, J.

OPINION OF THE COURT

Justice CASTILLE. This negligence action arose in the wake of the flooding of Springbrook Creek in Luzerne County, which resulted when Hurricane Gloria dropped over six inches of rain into that area in less than a twenty-four hour period ending in the early afternoon of September 27, 1985. Appellees are three homeowners, each of whom owned a separate parcel of residential real property along the banks of Springbrook Creek which was washed away or severely damaged by Gloria's floodwaters. Appellant PG Energy owned, maintained and operated four permitted water supply dams with attendant reservoirs in the Springbrook Creek watershed, all of which were upstream from appellees' properties.¹ Appellees claimed that the negligent design, maintenance and operation of the reservoirs/dams caused their losses, and prevailed in the action in the courts below. The primary issue which this Court accepted for *657review is what legal duty a water supply reservoir/dam owner has to undertake with respect to its dams in order to protect downstream property owners against floodwaters caused in the aftermath of a storm of the magnitude of Hurricane Gloria. Because we find that appellant was not negligent as a matter of law, we reverse the determinations below and enter judgment in favor of appellant.² As the respective geographical elevations of appellant's reservoirs/dams reveal, Springbrook Creek is a fairly steep mountain waterway: the Maple Lake Reservoir/Dam is at an elevation of

approximately 1617 feet above sea level; the Watres Reservoir/Dam is at approximately 1440 feet of elevation; the Nesbitt Reservoir/Dam is at approximately 1166 feet of elevation; and the Springbrook Intake Reservoir/Dam is at approximately 915 feet of elevation. The distance from Maple Lake to Springbrook Intake is approximately 5.3 miles. Appellees' properties were in close proximity to one another, at an elevation of approximately 700 feet, and one-half to three-quarters of a mile downstream from Springbrook Intake. Certain factual issues were disputed at trial, such as whether any of appellant's dams actually "overtopped"—that is, whether the volume of floodwater was such that the dams were unable to discharge the excess water gradually via the dams' spillways,³ to a point where the water spilled over the dams themselves (which are at significantly higher elevations than the spillways)—and what amount of rainfall were these dams required to be able to pass via spillway to be deemed safe for their intended purposes. Other salient facts, however, were not disputed, such as the fact that these dams were designed primarily to create water supply reservoirs, not as *658flood control dams; and that the dams did not fail as a structural matter—i.e., they did not spring leaks, burst, or wash away, and they held back the rain and rushing floodwaters to the maximum of their storage capacities.⁴ In addition, there is no dispute that, because certain of the reservoirs were not filled to capacity when Hurricane Gloria hit, the dams actually prevented some of Gloria's rain and flash floodwaters from passing downstream at all. Thus, the floodwater that washed away appellees' homes was attributable to Hurricane Gloria, and not to the water already pooled in appellant's upstream reservoirs when the storm hit. ; The theory of negligence pursued below was that appellant was obliged by both statute and by administrative regulation to do more than ensure that its dams did not fail structurally. Appellees claimed that, in addition to creating reservoirs of drinking water essential to the public health and welfare, appellant's dams were required to be designed, maintained and operated so as to cabin and safely pass on the rain and floodwaters which accompany a storm of the magnitude of Hurricane Gloria. Specifically, appellees alleged that appellant had a duty to design and maintain the dams with greater spillway capacities; that appellant was obliged to "draw down" the level of water in its reservoirs in anticipation of the storm; and that this storm posed a "dam hazard emergency," as that term is defined by regulation, which obliged appellant to warn downstream homeowners of the danger they faced from flood-waters as the storm intensified. The defense was that the duty of dam safety owed by appellant was confined to ensur- ing that the dams did not fail as a structural matter and, because these dams successfully passed the increased volume of water without failing structurally, no liability can arise. The courts below, while employing divergent legal theories of *659negligence liability, each concluded that although appellant's dams did not fail, appellant violated a duty to construct, maintain and operate them in a fashion that would have protected the downstream homeowners from these floodwaters, and that the homeowners' losses were the proximate result of that breach of duty. Procedurally, the question before this Court is the propriety of the lower courts' rulings upon appellant's motion for judgment notwithstanding the verdict ("judgment n.o.v."). That verdict was rendered by the trial judge, who sat as the factfinder

in this equity action. • Our scope of review with respect to whether judgment n.o.v. is appropriate is plenary, as with any review of questions of law. *Phillips v. A-Best Products Co.*, 542 Pa. 124, 665 A.2d 1167, 1170 (1995). The proper standard of review for an appellate court when examining the lower court's refusal to grant a judgment n.o.v. is whether, when reading the record in the light most favorable to the verdict winner and granting that party every favorable inference therefrom, there was sufficient competent evidence to sustain the verdict. *Wenrick v. Schloemann-Siemag Aktiengesellschaft*, 523 Pa. 1, 4, 564 A.2d 1244, 1246 (1989). Questions of credibility and conflicts in the evidence are for the trial court to resolve and the reviewing court should not reweigh the evidence. *Commonwealth, Dep't of Transp., Bureau of Traffic Safety v. Korchak*, 506 Pa. 52, 57, 483 A.2d 1360, 1362 (1984). *Adamski v. Miller*, 545 Pa. 316, 681 A.2d 171, 173 (1996). A review of the record and the trial judge's written findings of fact reveals the following: Appellant's reservoirs/dams were of earthen embankment construction and were erected between 1893 and 1925. The primary purpose of the dams was to collect and supply drinking water for public consumption. In the late 1970s, the U.S. Army Corps of Engineers administered a "National Dam Inspection Program" in response to the federal Dam Inspection Act. In conjunction with that program, consulting engineers prepared inspection reports for each of appellant's four dams between July of 1978 *660 and April of 1980. There is no suggestion in the reports, or elsewhere in the record, that the inspections sought to uncover violations of existing federal or Pennsylvania law and/or standards concerning the construction and maintenance of water supply reservoirs/dams. Rather, the stated purpose of the inspections and reports was to determine if the dams "constitute[d] a hazard to human life or property." The reports concluded that the Springbrook and Nesbitt dams were in "good" condition, while the Watres dam was in "fair" condition and the Maple Lake dam was in "poor" condition. Maple Lake Dam was rated "unsafe" because its spillway capacity was "seriously inadequate" as it could pass only 42 percent of the Probable Maximum Flood ("PMF") without overtopping the dam. The Pennsylvania Administrative Code provisions concerning dam safety define the PMF as: The flood that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in an area. The PMF is derived from the probable maximum precipitation (PMP) as determined on the basis of data obtained from the National Oceanographic and Atmospheric Administration (NOAA). 25 Pa.Code § 105.1.5 The Maple Lake report further noted that, if the dam should "fail," it would "significantly increase tailwater and cause loss of life downstream." The spillways on the Watres and Nesbitt dams likewise were deemed to be "seriously inadequate" because they too could not pass one-half of the PMF without overtopping the respective dams and, should the dams fail, there would be a risk of loss of life downstream. The spillways on Springbrook fared somewhat better, being deemed merely "inadequate," as they could pass about 53 percent of the PMF before that dam would be overtopped. All four dams were classified as "high hazard."⁶ *661 The reports made various recommendations respecting how to improve the physical condition of each dam and to increase spillway capacity. Appellant produced

evidence that, in response to the reports, it performed maintenance and repair work on the dams which effectively increased spillway capacity, albeit it did not reengineer the dams or spillways or undertake a major reconstruction effort. In addition, at the time when Hurricane Gloria struck, the reservoirs/dams were subject to inspection and regulation by the then-Pennsylvania Department of Environmental Resources (“DER”); the dams were permitted by DER. The trial court found as fact that, between the time of the reports to the Army Corps of Engineers and the arrival of Hurricane Gloria on September 27, 1985, appellant did not substantially improve, increase, modify or change the spillway capacity of any of the facilities. On September 27, 1985, Hurricane Gloria rapidly passed through the Springbrook Creek watershed in Lackawanna and Luzerne Counties, dumping substantially more rain (by a factor of two to three) than had been forecast by the National Weather Service (“NWS”). Appellees introduced expert testimony that the rainfall from the hurricane was so heavy as to exceed fifty (50%) percent of the PMF, which in turn should have exceeded the spillway capacities on the dams. This point was sharply disputed at trial. Appellees’ expert engineer, James Green, used the terms PMF and “100-year storm” interchangeably in discussing the rainfall, then calculated the 100-year storm/flood rainfall figure for Luzerne County as a mere 5.98 inches. Since the rainfall in the Springbrook Creek watershed from Hurricane Gloria exceeded 6.5 inches, Green concluded that the spillways obviously were inadequate to handle the storm. Green further opined that, pursuant to “standards in the engineering community,” dams must be designed to handle a 100-year frequency flood, irrespective of whether they are designed for water supply or flood control. Green also opined that one or more of appellant’s dams “definitely overtopped” or “flooded” and that the inadequacy of the dam system to handle this storm was the cause of the flood which destroyed appellees’ homes. However, Green did recognize that none of the dams failed structurally and that two of the reservoirs/dams (Watres and Nesbitt) were drawn down to well below capacity when the storm began; thus, the dam system actually protected the downstream homeowners from a significant amount of floodwater which would have passed naturally downstream in the absence of the dams. Green’s testimony equating the PMF and the 100-year frequency storm/flood is difficult to square with the Pennsylvania Code, which includes distinct definitions for those concepts. The Code definition of PMF focuses upon what amounts to a theoretical but plausible worst case scenario involving the “most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in an area.” 25 Pa.Code § 105.1. But the Code defines 100-year frequency flood differently: “100-year frequency flood—The flood magnitude expected to be equaled or exceeded on the average of once in 100 years; it may also be expressed as the flood having a 1.0% chance of being equaled or exceeded in a given year.” *Id.* Appellant’s meteorological expert, Gregory Forbes, testified that the PMF and ‘100-year flood/storm precipitation figures are calculated using different methods. According to Forbes, the PMF for Luzerne County is 23.87 inches; thus, to pass half the PMF, the spillways/dams would have to be able to accommodate over 11 inches of rain in a 24-hour period. Forbes’ testimony was corroborated by appellant’s

engineering expert, Gordon Warren. In addition, the engineering reports prepared for the Army Corps of Engineers recognized PMF figures in the 23 inch-plus range for these dams. Since the rainfall from Hurricane Gloria was only 6.5 inches, far less than half of the PMF, appellant's evidence suggested that the dams were functionally adequate to pass the water discharged by Gloria. In addition, and consistently with this formula, defense witnesses testified that the dams did not overtop. *663The distinction between the PMF and the 100-year frequency flood is not merely academic, nor is it necessarily a credibility matter which collapses into the trial court's factual findings. The distinction is pertinent under the Pennsylvania Code which classifies dams according to (1) size ("class") and (2) hazard potential in the event of an operational or structural failure ("category"), see 25 Pa.Code § 105.91,7 and the resulting joint classification then determines the governing "flood design criteria." Id. § 105.98. That flood design criteria, in turn, speaks in terms which specifically distinguish between the PMF and a 100-year frequency flood: § 105.98. Design flood criteria. (a) The discharge capacity or storage capacity, or both, shall be capable of safely accommodating the recommended design flood for the size and hazard potential classification of the dam as determined by § 105.91 (relating to classification of dams and reservoirs). The design flood is intended to represent the largest flood that need be considered in the evaluation of a given project. When a range of design flood is indicated, the magnitude that most closely relates to the size and hazard potential shall be selected. Design flood criteria shall be as indicated in the following table: Size and Hazard Potential Classification Design Flood A-1, A-2, B-1 PMF A-3, B-2, C-1 ;k PMF to PMF B-3, C-2 100 year to PMF C-3 50 year to 100 year frequency Thus, a C-1 class dam such as Springbrook Intake, for example, must be designed to accommodate from one-half to the full PMF, which is precisely the standard adverted to in *664the reports prepared for the Army Corps of Engineers for that dam.⁸ Larger dams of equal or slightly less hazard potential, however, must be capable of accommodating the entire PMF, while dams with a lower hazard classification need only accommodate floods measured by the 100-year frequency flood to -Jé of the PMF, or the 50 year- to 100-year frequency flood. It is plain from this escalating risk regulatory framework that the 100-year frequency flood number is substantially lower than one-half of the PMF. The trial court apparently disregarded the regulatory structure as well as appellant's evidence, as it made a specific finding that the 6.5 inches of rain dropped by Hurricane Gloria exceeded 1/2 of the PMF. The court made no specific finding concerning the disputed point of whether any of the dams overtopped. The only evidence concerning the status of the reservoirs/dams on the day of the hurricane came from John Powell, whom appellant employed as a caretaker for the reservoirs. Part of Powell's job included taking daily spillway measurements. On September 27, 1985, Powell worked from 6 a.m. to 2:30 p.m., during which time he took spillway measurements at the lower three dams. Powell's last spillway measurement that day occurred before 10 a.m.; the next spillway measurements were not taken until the following morning. Appellees' homes were flooded in the interim, at approximately 3:00-3:30 p.m. on September 27th. It was also undisputed that, because appellant did not deem there to be a

dam hazard emergency, it did not activate its emergency action plan and/or issue any warning to local authorities or downstream property owners concerning a potential dam failure/flood hazard facing them, nor did appellant attempt to draw down the water level in the reservoirs in anticipation of the storm. The trial court issued findings in which it concluded that, although “the primary purpose for the construction and subsequent operation” of these dams was to collect and supply *665water, “[r]egardless of their purpose, [appellant] had an obligation to design, operate and maintain the [reservoirs/dams] so as to avoid flooding to properties located below----” Decree Nisi (Findings of Fact), 5-6, ¶¶ 37-38. The court further found that appellant had a duty to (1) “operate and maintain its reservoirs/dams in a safe fashion,” which included providing adequate spillways; (2) warn the general public and appellees of “any hazards that may be associated with the operation of their reservoirs/dams;” (3) abide by applicable statutory and regulatory provisions under the Dam Safety and Encroachments Act, 32 P.S. § 693.1 et seq. (the “Dam Safety Act” or the “Act”); and (4) “operate and maintain its reservoirs/dams so as to protect the property” of downstream individuals. Decree Nisi (Conclusions of Law), 13-14, ¶¶ 3-6. The court concluded that appellant negligently failed to operate and maintain its facilities in accordance with the terms of its permits, the Act, and administrative regulations; and that this failure was the proximate legal cause of the flooding of appellees’ properties. *Id.* at 14, ¶¶ 7-11. The court determined that appellant was “liable ... on the legal theory of negligence” for the harm appellees suffered and appellees were entitled to compensation for their real and personal property losses. *Id.* at 15, ¶¶ 12-14.9 In an opinion filed after appellant appealed the final decree to Superior Court, the trial court reiterated its legal conclusions that appellant had a duty to maintain its reservoirs/dams in a safe condition and to take necessary steps to protect downstream property owners from the floodwaters of a storm such as Hurricane Gloria. This duty included maintaining adequate spillways, drawing down the level of stored water in anticipation of “heavy precipitation,” warning property owners whose property is “threatened” by its reservoirs/dams, and developing and following an emergency action plan for dam hazard emergencies. *Slip op.* at 6. The trial court stated that appellant “should have reasonably found that [sic] Hurricane *666Gloria and the consequent inadequate hydraulic capacity of Springbrook [Intake] to constitute an imminent threat to life and property and found that a dam hazard emergency existed.” *Id.* at 7-8. Further, “[b]y allowing the spillways on their [sic] reservoirs/dams to become inadequate, by not drawing down the water supplies in [its] reservoirs/dams, and by not instituting or following [its] emergency action plan, [appellant] breached [its] legal duty.” *Id.* at 9. This breach of duty, according to the trial court, was a “substantial factual cause” of the flooding of Springbrook Creek and appellees’ attendant losses. *Id.* Appellant appealed and the Superior Court ultimately affirmed the judgment below.10 On the question of appellant’s duty, the panel noted that appellant’s reservoirs/ dams are regulated by the Dam Safety Act—specifically, Section 693.13. That Section reads, in pertinent part, as follows: § 693.13. Duties of Owners (a) The owner of any dam, water obstruction or encroachment shall have the legal duty to:

(1) monitor, operate and maintain the facility in a safe condition in accordance with the regulations, terms and conditions of permits, approved operating plans and orders of the department issued pursuant to this act; .

* * *

(3) immediately notify the department and responsible authorities in downstream communities of any condition which threatens the safety of the facility, and take all necessary actions to protect life and property, including any action required under an emergency plan or department order issued pursuant to this act. ...

32 P.S. § 693.13(a)(1), (a)(3). The panel construed the trial court's factual determinations as including a finding that appellant had violated Section 693.13 and its accompanying regulations "by failing to maintain adequate spillways, failing to draw down the water levels of its dams, failing to follow its emergency action plan, and failing to warn individuals and municipalities whose property was at risk of flooding." 765 A.2d at 302. The panel concluded that these findings were supported by the record. However, on the question of duty, the panel's approach was very different from that of the trial court. The panel sua sponte determined that the violation of Section 693.13 found by the trial court "constituted negligence per se." *Id.* In rendering this interpretation of the Dam Safety Act, the panel rejected the decision of the U.S. Court of Appeals for the Third Circuit in *Beaver Valley Power Co. v. National Eng'g & Contracting Co.*, 883 F.2d 1210 (3rd Cir.1989). In the panel's view, a per se approach was appropriate "because we find it simpler to regard the Act as the absolute standard of conduct governing dam owners rather than to ignore the statute and create a parallel, abstract, 'reasonable person' standard." 765 A.2d at 303. Applying its per se approach, the panel deemed it immaterial that appellant's facilities were permitted and that its dams "did not breach, leak or fail;" rather, the material fact was that the dams "overflowed." The panel also agreed with the trial court that appellant should have responded to Hurricane Gloria by declaring a "dam hazard emergency," activating its emergency action plan, and warning downstream homeowners. The panel rejected appellant's argument that the "safety" concerns addressed by the Act and the accompanying regulatory structure have to do with "the structural integrity of the dam." In the panel's view, the safety referred to in the Act. was the security of downstream residents; therefore, appellant "had a duty to warn people downstream of the dangers posed by Hurricane Gloria," even if that danger was totally unrelated to the prospect of a structural dam failure. The panel also concluded that appellant had "a duty to draw down its water levels" because the relevant regulation requires such action in the event of a dam hazard emergency. *Id.* at 303-04. *668 The panel next rejected appellant's causation argument— i.e., the argument that the sole cause of damages here was the water dropped by the hurricane since, inter alia, in the total absence of the dams more floodwater would have proceeded down this watershed and left even more devastation in its wake. The panel rejected this argument, finding that the evidence showed both an Act of God (the hurricane) and negligence by virtue of appellant's failure to comply with the Dam Safety Act. *Id.* at 304. On this

appeal, appellant argues, as it did below, that the safety requirements imposed by the Dam Safety Act relate solely to structural stability and do not impose any greater collateral duty in negligence beyond what might be expected under common law. Appellant further argues that the term “dam hazard emergency” as defined in the governing administrative regulations likewise connects the emergency directly to the stability of the dam. The Code indeed defines “dam hazard emergency” in such terms: “a condition which the Department, permittee or owner of the dam reasonably finds constitutes an imminent threat to life or property above or below a dam, whether arising from the condition of the dam and appurtenant works or extraordinary natural conditions, affecting the safety and stability of the dam, including, but not limited to, flood, earthquake, fire and ice jam.” 25 Pa. Code § 105.135 (emphasis supplied). Appellant submits that it does not owe a statutory or regulatory duty to downstream homeowners to prevent or mitigate flooding caused by unpredictable natural phenomena such as hurricanes, rainstorms and snow melts, since its dams are permitted as water supply reservoirs and not as flood control reservoirs. Appellant further argues that the expansive duty imposed upon it by the courts below amounts to a “radical and unacceptable standard of absolute liability” for the owners of water supply reservoirs. Under this new duty, “[r]eservoir owners and operators will be held liable even when their facilities hold fast, experience no structural failure, add not a single drop to Nature’s flood waters, and, in fact, reduce the downstream flow of those waters.” Brief for Appellant, 19. Appellant *669submits that the lower courts overlooked the bedrock principle of negligence law that conduct is only negligent if the harmful consequences could have been reasonably foreseen and prevented by the exercise of reasonable care. Here, appellant submits, Hurricane Gloria’s path and severity were unforeseeable, unpredictable and unexpected based upon the NWS forecasts. Appellant also argues that, although the Dam Safety Act certainly provides specific guidance relating to the particular hazards posed by dams, duties arising from the Act should be viewed in conformity -with common law principles of liability involving “water jurisprudence.” Appellant notes that, under well-settled Pennsylvania law, the owner of upper land is not a guarantor against damage caused by surface water run-off through a natural course to lower land; rather, the upstream landowner is liable for such water run-off only if he has diverted the water from its natural channel by artificial means, or unreasonably or unnecessarily increased the quantity of water or changed the quality of the water discharged downstream. *Id.* at 20-21, citing *Lucas v. Ford*, 363 Pa. 153, 69 A.2d 114 (1949); *LaForm v. Bethlehem Twp.*, 346 Pa.Super. 512, 499 A.2d 1373 (1985); *Piekarski v. Club Overlook Estates, Inc.*, 281 Pa.Super. 162, 421 A.2d 1198 (1980). Appellant further notes that other jurisdictions take precisely this approach to the question of the duty of dam owners, recognizing that the only obligation is not to worsen conditions downstream beyond what would have occurred in the absence of the dam. Brief for Appellant, 19-21 & n. 5 (collecting cases). Appellant submits that the same principle obviously under-girds the Dam Safety Act and its accompanying regulations, since they “punish and protect against dam failures: events which would unreasonably increase the quantity or quality of the natural water falling upon or passing through a dam owner’s

land.” Reply Brief, 12. In the case sub judice, appellant argues, its reservoirs/dams did not concentrate, channel or increase the force of the waters naturally produced by Hurricane Gloria; to the contrary, appellant argues, those *670reservoirs protected appellees by preventing some of the hurricane’s water from passing downstream. Appellees counter that appellant is liable irrespective of the fact that its dams did not fail structurally. Appellees take an expansive view of the duties that dam-owners owe, as a matter of law, to downstream homeowners. Appellees argue that, from a design standpoint, there is no difference between water supply reservoirs/dams and flood control dams: each must be engineered so as to protect downstream landowners. Thus, even if a dam retains its structural integrity, as these dams did, a dam owner is liable in negligence if the dam is not designed to hold, and/or if it does not in fact hold, waters which might accompany a storm of the magnitude of Hurricane Gloria. Appellees further argue that the harm that these dams could cause by failing to stem the flow of the waters from a storm such as Hurricane Gloria was foreseeable because the engineering reports provided to the Army Corps of Engineers highlighted the inadequacy of the spillway capacities, and yet appellant failed to remedy those deficiencies. Appellees also adopt Superior Court’s view of appellant’s duty to ensure “safety” under the Dam Safety Act. Appellees look to the general definition of safety in the Act, which provides that, unless the context clearly indicates otherwise, “safety” means “[s]ecurity from the risk or threat of significant loss or injury to life, health, property and the environment.” Since property loss occurred here, and would not have occurred if the dams had not overtopped or flooded, appellees argue, the dams were “unsafe.” Thus, from appellees’ perspective, a dam is “unsafe” and “fails” whenever it fails to protect downstream homeowners from flooding. This Court also has the benefit of an amicus brief filed in support of appellant by the Pennsylvania Department of Environmental Protection (DEP), the successor agency to DER, and the agency that administers the Dam Safety Act.¹¹ DEP argues that Superior Court’s interpretation of the Act is contrary to the manner in which DEP has administered it. *671DEP advises that it did not deem appellant’s spillways, as modified in response to the Army Corps of Engineer reports, to be seriously inadequate since they could discharge over 1k of the PMF. Because the spillways were adequate to handle this storm (which DEP says produced only 28% of the PMF) and because the storm posed no threat to the physical safety of the dams and reservoirs, DEP argues that no “dam hazard emergency”- arose, and therefore, appellant had no duty to warn, much less a duty to draw down the water which is stored in the reservoirs for the benefit of the public. DEP recognizes that a natural condition such as a hurricane could represent a dam emergency, but only if it affected the stability of the dam; a hurricane is not a per se dam emergency. The fact that a “flood emergency” is posed by a storm, DEP notes, does not equate to a “dam hazard emergency.” In DEP’s view a public supply reservoir/dam which is structurally safe, as these dams were, is not in violation of the Act. Moreover, DEP takes issue with the notion of a duty to draw-down a water supply reservoir in advance of a storm. Such a requirement is impractical, DEP notes, because it takes days to draw down a reservoir, the course and severity of storms and hurricanes are unpredictable,

and an unnecessary drawdown may itself cause a public safety hazard—an insufficient water supply. Preliminarily, we note that we disagree with Superior Court’s sua sponte holding that violations of Section 693.13 of the Act should be deemed proof of negligence per se. Assuming that such a per se negligence holding is warranted in an appropriate case, logically, the statute at issue would have to be so specific as to leave little question that a person or entity found in violation of it deviated from a reasonable standard of care. As the Third Circuit noted in *Beaver Valley Power Co. v. National Engineering & Contracting Co.*, 883 F.2d 1210 (3rd Cir.1989): For a legislative enactment to be considered as “fixing a standard for all members of the community, from which it is negligence to deviate,” the act must first of all “provide!] that under certain circumstances particular acts shall or *672shall not be done....” W. Keeton, D. Dobbs, R. Keeton, D. Owen, *Prosser & Keeton on the Law of Torts* § 36 at 220 (1984). *Id.* at 1221. Many statutes provide very general statements of what constitutes compliance or deviation, while others are quite specific. The Motor Vehicle Code provides a useful example of the distinction. Section 3361 of the Motor Vehicle Code contains the very general requirement that operators of motor vehicles drive at a “reasonable and prudent” speed: No person shall drive a vehicle at a speed greater than is reasonable and prudent under the conditions and having regard to the actual and potential hazards then existing, nor at a speed greater than will permit the driver to bring his vehicle to a stop within the assured clear distance ahead. Consistent with the foregoing, every person shall drive at a safe and appropriate speed when approaching and crossing an intersection or railroad grade crossing, when approaching and going around curve, when approaching a hill crest, when traveling upon any narrow or winding roadway and when special hazards exist with respect to pedestrians or other traffic or by reason of weather or highway conditions. 75 Pa.C.S. § 3361. What constitutes a reasonable and prudent speed is unspecified; since the statute essentially sets forth a traditional reasonable man standard, it would be impracticable to base a finding of negligence per se upon this provision. The very next section of the Code, however, sets forth the specific numeric limits on vehicle speed which every Pennsylvania driver must obey or be deemed at fault. *Id.* § 3362. Section 3362 speaks in absolutes; there is no room for the flexibility of the reasonable man standard. Exceeding the designated limit is, by statutory definition, unreasonable. A violation of Section 693.13 of the Dam Safety Act is not an appropriate basis for a finding of per se negligence. In this regard, we find persuasive, where Superior Court did not, the analysis of the Third Circuit in *Beaver Valley*. In that case, the defendant was constructing a bridge and to that end *673built cofferdams, which are temporary structures used in bridge-building to “dewater” the area around piers under construction and for use as a working platform. The displacement of water by the cofferdams caused the water level in the upstream plaintiff power company’s hydroelectric dam to rise. Because the power company generated electricity when water from an upper pool above the dam fell to a lower pool in the dam itself, the artificially higher water level in the lower pool decreased the distance between the two pools, thereby reducing the amount of power generated. The plaintiff power company therefore sued the builder of the downstream bridge for

losses sustained as the result of a decrease in the dam's capacity to produce electricity. The power company first argued that the bridge owner was negligent per se because it had built and maintained the cofferdams with an expired, and therefore invalid, permit in violation of Section 693.13 of the Dam Safety Act. The Third Circuit, which was sitting in diversity and thus was tasked to anticipate how this Court might rule on the questions of Pennsylvania law presented, rejected this argument, finding that licensing and permit requirements do not usually create per se rules of civil liability. 883 F.2d at 1221-22. The power company next claimed that negligence per se should be found because the bridge owner violated Sections 693.13(a)(1) and (3) of the Act, the precise sections involved in this case. The Third Circuit deemed it unlikely that this Court would find that these provisions would support a finding of negligence per se due to the lack of specificity in the conduct required: These provisions do not create standards of care in any more specific sense than the law of negligence in general. Unlike those legislative enactments whose violation is considered to constitute negligence per se, compare *Miller v. Hurst*, 302 Pa.Super. 235, 448 A.2d 614, 618 (1982) (violation of law requiring dog to be kept on leash constitutes negligence per se), they do not describe particular acts that should or should not be done. The general exhortations to maintain the facility in a "safe" condition and to take "necessary" action to protect property at most tell the *674permit holder to act as the reasonable person would. They do not provide guidance as to a legislative judgment that the failure to engage in certain conduct constitutes negligence; rather, they raise questions much like the question of whether particular conduct should be considered negligent: whether a person has maintained a dam in a "safe" condition and whether a person took "necessary" action. Accordingly, we do not think the Pennsylvania Supreme Court would deem these provisions suitable for adoption as a per se standard of negligence. 883 F.2d at 1222. We concur with the Third Circuit's conclusion that these provisions in Section 693.13 are not sufficiently specific such that a violation should be deemed to give rise to a finding of negligence per se. Notwithstanding that it might be "simpler" to conclude otherwise as Superior Court did, the fact remains that Section 693.13 sets forth a general standard of conduct which simply requires the tried and true application of law to fact. As the Third Circuit correctly recognized, the statute essentially expresses the familiar and flexible reasonable man standard and, as such, it does not support a per se negligence shortcut. The remaining and more difficult question is whether the trial court (which did not operate on an assumption of per se negligence) properly found that appellant was negligent by applying a traditional reasonable person standard, in light of the duties imposed on dam owners under the Dam Safety Act and/or the common law. We hold that the evidence here was insufficient as a matter of law to prove that appellant was negligent. "A cause of action in negligence requires allegations that establish the breach of a legally recognized duty or obligation that is causally connected to damages suffered by the complainant." *Sharpe v. St. Luke's Hosp.*, 573 Pa. 90, 821 A.2d 1215, 1218 (2003). This Court has noted that, "[t]he primary element in any negligence cause of action is that the defendant owes a duty of care to the plaintiff." *Althaus ex *675rel. Althaus v. Cohen*, 562 Pa. 547, 756 A.2d 1166,

1168 (2000). The Althaus Court further summarized the traditional considerations of public policy involved in any assessment of the existence of a duty of care as follows: “In determining the existence of a duty of care, it must be remembered that the concept of duty amounts to no more than ‘the sum total of those considerations of policy which led the law to say that the particular plaintiff is entitled to protection’ from the harm suffered.... To give it any greater mystique would unduly hamper our system of jurisprudence in adjusting to the changing times. The late Dean Prosser expressed this view as follows: These are shifting sands, and no fit foundation. There is a duty if the court says there is a duty; the law, like the Constitution, is what we make it. Duty is only a word with which we state our conclusion that there is or is not to be liability; it necessarily begs the essential question. When we find a duty, breach and damage, everything has been said. The word serves a useful purpose in directing attention to the obligation to be imposed upon the defendant, rather than the causal sequence of events; beyond that it serves none. In the decision whether or not there is a duty, many factors interplay: The hand of history, our ideas of morals and justice, the convenience of administration of the rule, and our social ideas as to where the loss should fall. In the end the court will decide whether there is a duty on the basis of the mores of the community, ‘always keeping in mind the fact that we endeavor to make a rule in each case that will be practical and in keeping with the general understanding of mankind.’ [Prosser, *Palsgraf Revisited*, 52 Mich. L. Rev. 1, 14-15 (1953).]” 756 A.2d at 1168-69, quoting *Sinn v. Burd*, 486 Pa. 146, 404 A.2d 672, 681 (1979) (citation and footnote from *Sinn* omitted). Accord *Sharpe*, 821 A.2d at 1219. The question of whether a duty exists is a legal one “assigned in the first instance to the trial court and- subject to plenary appellate review.” *Id.* *676 Like DEP, we do not view Section 693.13 and the accompanying regulations as imposing a general duty of flood control upon dam owners for the purpose of protecting downstream homeowners. Although it is true that all dams control flooding if the reservoir created by the dam is not filled to capacity when a storm hits, that fact does not mean that the owner of a water reservoir facility has assumed the duty to become a de facto insurer of downstream property owners against the course of floodwaters generated by forces unrelated to the structural integrity of the dam. The statutory and regulatory framework at issue is directed to the safety and integrity of these man-made facilities themselves—which, in turn, ensures that they do not cause extraordinary harm to downstream homeowners through structural failure. That such is the purpose of the legislation is apparent from its plain language. Dam owners are duty-bound to monitor, operate and maintain the facility in a safe condition. 32 P.S. § 691.13(a)(1) (emphasis supplied). Their duty to notify and to “take all necessary actions to protect life and property” likewise is tied into situations where a condition arises “which threatens the safety of the facility.” *Id.* § 693.13(a)(3) (emphasis supplied). The regulatory definition of “dam hazard emergency” is equally explicit: although the triggering condition may be external to the dam (“condition of the dam and appurtenant works or extraordinary natural conditions ... including, but not limited to, flood, earthquake, fire and ice jam”), it must be one which thereby “affect[s] the safety and stability of the dam.” 25 Pa.Code § 105.135 (emphasis supplied). Both

Superior Court and appellee view appellant's duty of "safety" to be outwardly-oriented: i.e., the primary duty is not to assure the structural safety of the dam, but rather to ensure the safety of downstream property owners. Indeed, Superior Court went so extraordinarily far as to find that, "Appellant's duty to warn downstream property owners is triggered by any event which threatens life, health, property or the environment, regardless of whether the integrity of the dam is implicated." 765 A.2d at 304. In forwarding this *677broad construction of appellant's duty, Superior Court focused upon the Act's general definitional section which defines "safety" as meaning "[s]ecurity from the risk or threat of significant loss of injury to life, health, property and the environment." 32 P.S. § 693.3. However, the panel overlooked the fact that that definitional section begins with the caveat that this particular "meaning" of the term applies "unless the context clearly indicates otherwise." *Id.* The context of the governing provisions at issue here speaks not to the integrity of downstream homeowners and their property, but explicitly to "the safety of the facility/dam." Of course, a natural byproduct of the dams remaining structurally sound is that the persons and property of downstream homeowners are protected as well. But, that is a far cry from finding a legislative intent to impose a statutory duty upon dam owners not only to protect downstream property owners against foreseeable dangers resulting from dam failure, but also to take protective actions against "any event which threatens life, health, property or the environment." The Act may fairly be said to impose a duty upon dam owners to protect the public from foreseeable harms that would result from the failure of the facility—irrespective of what might occasion that danger of failure. To read into the narrow and specific provisions of the Act some greater duty to take affirmative action to protect against dangers arising from some other agency, however, is unwarranted.¹² The duty imposed on dam owners to ensure the integrity of their dams is no small matter in and of itself. The regulatory structure understandably distinguishes between facilities depending upon their size and volume and their prospective danger to the public, and modulates the level of obligation accordingly. For example, the riskier the dam is in the event of failure, the greater is the regulatory requirement regarding spillways. It is obvious both from the testimony below and as *678a matter of common sense that the primary safety purpose of a spillway is to protect the integrity of the dam structure. If the volume and speed of water entering a reservoir were to exceed the capacity of the spillway to modulate the volume of water in the reservoir, and then to a point where the dam itself exceeded its capacity, there is a risk of overtopping and concomitant erosion, leakage, or bursting. If a dam leaks or bursts due to negligent design, maintenance or operation, the resulting direct damage to downstream homeowners is not due to an Act of God, but to the sudden release of that which man determined to artificially store and concentrate. By undertaking to change the natural pooling and dispersal along the waterway, the dam's owner necessarily assumes a duty respecting the integrity of the dam. But, the owner does not thereby undertake to insure all downstream homeowners against the prospect of floods having nothing to do with the integrity of the dam, and the legislation does not oblige him to do so. Appellees' own theory of liability highlights the impracticality of the

multifaceted duties they would have the courts impose upon dam owners. Appellees make much of the fact that the engineering reports provided to the Army Corps of Engineers highlighted the deficiency in the capacity of the spillways of these dams to disperse floodwaters from the most severe probable storm. Appellant aptly rejoins, however, that if larger spillways of greater discharge capacity had passed on more water into the watershed than these did, the danger to appellees would have increased. In short, the primary danger which a greater spillway capacity guards against during the course of a storm is the failure of the dam—which is the single most catastrophic event at issue, and the event with which the Army Corps was concerned. But, at least in an instance where a dam does not fail, as was the case here, a greater spillway capacity and discharge would have presented a greater danger of flooding to downstream homeowners. The duty that appellant owed to downstream homeowners and to the public generally was to design, maintain and operate its dams in a fashion that ensured that their structural integrity would be maintained safely even in a storm of the predictable (if rare) intensity of Hurricane Gloria. It was undisputed that appellant's dams did not fail: they did not burst or leak and, indeed, to the extent that two of the reservoirs were well below capacity at the time the storm was raging (in a period when the region had been in the midst of a drought), those reservoirs acted unintentionally as flood control facilities and thereby protected downstream homeowners • from a certain amount of Gloria's waters. Because the dams did not fail, and the damages which appellees sustained were a result of the natural effect of the storm, appellant did not breach any legal duty to appellees. The damages that appellees suffered resulted not from a rush of water released through the breach or failure of a dam, but from the natural effect of a storm of this magnitude inundating this sort of severe downhill watershed, where landowners had unwittingly and tragically built their homes in the natural floodplain of the watershed. We note that our understanding of appellant's duty to appellees, both under the statute and under common law, comports with the traditional approach to the respective rights and duties of landowners when water run-off is at issue.' As this Court noted over half a century ago, summarizing what was already well-settled law: The owner of upper land has the right to have surface waters flowing on or over his land discharged through a natural water course onto the land of another, but he may not cut an artificial channel to divert that water. ... He may make proper and profitable use of his land even though such use may result in some change in quality or quantity of the water flowing to the lower land. ... If that change is not unreasonable in relation to the use, any loss resulting to the owner of the lower land is *damnum absque injuria*. ... In that connection, the upper owner may lay artificial drains in his land provided they do not divert the water from its natural course or cause unnecessary injury to the lower owner. ... From those rules it is clear that only where the water is diverted from its natural channel or where it is unreason*680ably or unnecessarily changed in quantity or quality has the lower owner received a legal injury. *Lucas v. Ford*, 363 Pa. 153, 69 A.2d 114, 116 (1949) (citations omitted). In the case sub judice, the floodwaters that inundated appellees' properties were not .channeled or concentrated by appellant and diverted or dumped into the watershed. The waters came from

Hurricane Gloria. The dams held back those floodwaters to the maximum of their capacities and it was only the natural flow of excess water produced by the storm which proceeded down through the natural watercourse and caused the damage to appellees' properties. We have not lost sight of the sudden and severe tragedy which has befallen appellees as a result of this extreme weather event. Responsibility for that tragedy, however, cannot lawfully be assigned to appellant, whose dams neither failed nor caused the damage that appellees suffered. Accordingly, the judgment below is reversed and judgment is entered in favor of appellant. Former Chief Justice ZAPPALA did not participate in the decision of this case. Justice NEWMAN files a concurring opinion. . The dams/reservoirs were subsequently acquired by the Pennsylvania-American Water Company, which is not a party to this appeal, but which has filed a brief as Amicus Curiae in support of appellant. . Appellant also raises issues related to the calculation of compensatory damages and delay damages, which we will not reach given our disposition of the controlling liability issue. . A spillway is defined as "[a] device which safely conveys the design flood of a dam without endangering its safety or integrity." 25 Pa.Code § 105.1. The spillway is built at a height below the height of the dam and functions by allowing the reservoir to pass on excess rain or natural water runoff, thus protecting the dam against overload and failure (in the sense of a breach of the structure), while maintaining the optimum water capacity. . The evidence below revealed that there are significant design and functional differences between flood control dams and water storage dams. A flood control dam is typically maintained with little or no water in the reservoir so as to maximize the ability to protect lower elevations from heavy rains and potential flooding. In contrast, a water supply reservoir is usually maintained as close to normal capacity (spillway height) as nature provides, so as to protect against periods of drought. . Although the reports to the Army Corps of Engineers did not advert to the Pennsylvania Code definition of PMF, the Code definition is consistent with the usage reflected in the reports and in the testimony at trial. . The "high hazard" designation was unrelated to any findings regarding the adequacy of the spillways, but rather was a function of their mere location upstream from a populated area. This designation is consistent with the approach under Pennsylvania regulatory law, which designates as high hazard a dam which is "so located as to endanger populated areas downstream by its failure." 25 Pa.Code § 105.1. . A Class A dam is one which either has an impoundment storage area of 50,000 or more acre feet, or is 100 or more feet in dam height; a Class B dam is one which either has an impoundment storage area of 1,000 to 50,000 acre feet or is 40 to 100 feet in dam height; and a Class C dam is one which either has an impoundment storage area of up to 1000 acre feet, or is equal to or less than 40 feet in dam height. 25 Pa.Code § 105.91. A Category 1 dam is one where the potential loss of life from failure is substantial and/or the potential economic loss is excessive; a Category 2 dam is one where the potential loss of life is "few" and/or the potential economic loss is "appreciable;" a Category 3 dam is one where no loss of life is expected and the potential economic loss is minimal. Id. . In the testimony below, it appeared to be undisputed that appellant's dams were required to pass between % PMF to PMF. . Following an initial delay

damages remand by the Superior Court, the trial court ultimately awarded damages to appellees in the aggregate of \$696,781.58, including delay damages. . The Superior Court initially rejected appellant's appeal in a published opinion, except for the issue of delay damages, which it remanded to the trial court for initial resolution. *Shamnoski v. PG Energy*, 765 A.2d 297 (Pa.Super.2000). Following that remand, Superior Court issued a memorandum decision on March 7, 2001, affirming the final decree below. . Appellant joined DEP as an additional defendant at trial but, at the completion of trial, DEP's motion for nonsuit was granted. . We do not dispute that it is within the power of the General Assembly to require more of dam owners, given the inherent flood control purpose that dams could be required to serve. But, that is not what the current statutory structure requires and we will not read into it a duty which does not there exist.