

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

THE ST. PAUL FIRE AND MARINE	:	CIVIL ACTION
INSURANCE COMPANY,	:	
Plaintiff	:	
	:	
v.	:	
	:	
THE NOLEN GROUP, INC., et al,	:	
Defendants	:	NO. 02-8601 (lead consolidated case)

ZURICH AMERICAN INSURANCE	:	CIVIL ACTION
COMPANY,	:	
Plaintiff	:	
	:	
v.	:	
	:	
THE NOLEN GROUP, INC., et al,	:	
Defendants	:	NO. 03-3192 (consolidated case)

FEDERAL INSURANCE COMPANY, et al,:	:	CIVIL ACTION
Plaintiffs	:	
	:	
v.	:	
	:	
THE NOLEN GROUP, INC., et al,	:	
Defendants	:	NO. 03-3651 (consolidated case)

MEMORANDUM AND ORDER

Gene E.K. Pratter, J.

May 13, 2005

Currently before the Court are three Motions to Preclude Expert Testimony, either in whole or in part. Defendant Baringer filed a Motion in Limine to Preclude Certain Expert Testimony of plaintiffs' expert, Rocco R. Vespe, P.E. on February 18, 2005. Plaintiffs filed a Motion to Preclude the expert testimony of Joseph B. Mills, P.E., and portions of the expert testimony of Stephen M. Wistar, Jerry K. Snyder, and James A. Smith, Ph.D., on February 22,

2005. Defendant Brubacher filed a Motion in Limine to Preclude Plaintiffs' Expert Roger Ruggles, Ph.D., from Offering Certain Expert Opinion Testimony at Trial on February 22, 2005.

After the Daubert hearings and the oral arguments on these Motions, the Court finds that there is no basis to exclude any of the proposed testimony being challenged. Therefore, these Motions will be denied for the following reasons.

I. FACTUAL BACKGROUND

These consolidated cases arise from flooding on June 16, 2001 during Tropical Storm Allison. During the storm, the Sandy Run Creek in Whitmarsh Township flooded, causing several buildings to be damaged by several feet of water. Some of the flooded buildings housed the offices of the NCO Group, Inc., NCO Financial Systems, Inc., Teleflex, Inc., HRPT Properties Trust, HUB LLC, M&P Partners REIT Management and Research, and BISYS Group, Inc. The St. Paul Fire and Marine Insurance Company ("St. Paul") insured and provided coverage to NCO Group, Inc. and NCO Financial Systems, and is now their subrogee. Zurich American Insurance Company ("Zurich") insured and provided coverage to Teleflex, Inc after the flood, and is now Teleflex's subrogee. Federal Insurance Company insured and provided coverage to HRPT Properties Trust, HUB LLC, and M&P Partners REIT Management and Research, and is now their subrogee. Finally, Great Northern Insurance Company insured and provided coverage to BISYS Group, Inc., and is now its subrogee.

According to Plaintiffs, the flooding was caused or made more severe by the collapse of a bridge owned by SEPTA, the Fort Washington Bridge along the R5 line. This bridge was located over the Sandy Run Creek and was near the Garrison Greene development site. The Garrison Greene site is on a steep hillside leading down into the Sandy Run Creek. Plaintiffs contend that

SEPTA's failure to properly maintain its bridge, along with the excessive water run-off from the Garrison Greene site caused by the negligent construction sequence and/or technique of the other defendants, caused SEPTA's bridge to collapse and resulted in a damming of the Sandy Run Creek.

Plaintiffs, as subrogees, sued several defendants. In their complaints, Plaintiffs allege that SEPTA's improper maintenance of the collapsed bridge was negligent and a nuisance, and SEPTA should be found liable.¹ Plaintiffs also make claims against The Nolen Group, Inc., Michael Anthony Homes, Inc., and Garrison Greene Associates, L.P. as the owners and developers of the Garrison Greene site, who, according to Plaintiffs, negligently developed the Garrison Greene site leading to the excessive storm water run-off that contributed to the collapse of SEPTA's bridge. Plaintiffs also assert that the contractors who cleared and excavated the Garrison Greene site, namely Brubacher Excavation, Inc. and Warren W. Baringer, Jr., were negligent. Finally, Plaintiffs asserted that Andersen Engineering Associates, Inc., as the designer of the development plans, was negligent.²

Due to the complexity of the matter, the parties have consulted numerous experts who are expected to testify. Two of Plaintiffs' experts, are Rocco Vespe, P.E., and Roger W. Ruggles, Ph.D. Mr. Vespe is expected to testify on general construction practices and the effects the specific construction practices at the Garrison Greene development site had on storm water runoff. Defendant Warren W. Baringer, Jr., ("Baringer") challenges the portions of Mr. Vespe's

¹ Federal Insurance Company and Great Northern Insurance Company have voluntarily dismissed their claims against SEPTA.

² The Court issued an Order on March 16, 2005 granting summary judgment and dismissing the claims against Andersen Engineering.

testimony regarding the effect the clearing and grubbing of the Garrison Greene site had on the storm water run-off and whether Baringer's actions "was contrary to accepted construction practices." Dr. Ruggles is Plaintiffs' expert on hydrology. Defendant Brubacher seeks to exclude certain of Dr. Ruggles's testimony. Specifically, Brubacher argues that Dr. Ruggles should not be allowed to: 1) testify about total rainfall produced over the Sandy Run drainage basin during Tropical Storm Floyd in September 1999 and Tropical Storm Allison in June 2001; 2) testify about peak storm water runoff flow from the Garrison Greene site during Allison; 3) offer any opinion testimony employing or based upon his laboratory model study; 4) offer any opinion testimony employing or based upon his animation; and 5) offer any opinion testimony regarding causation.

Baringer and Brubacher have, collectively, consulted and expect to call three expert witnesses whose testimony is being challenged in part by Plaintiffs. These expert witnesses are Stephen M. Wistar, Jerry K. Snyder, P.E., and James A. Smith, Ph.D. Plaintiffs also challenge the entire proposed testimony of Brubacher's expert, Joseph B. Mills.

Mr. Wistar is the Defendants' meteorological expert and will be called to testify on the strength of Allison and its effects. Plaintiffs want to exclude Mr. Wistar's testimony regarding any return intervals for Floyd and Allison that exceed 100 years.

Mr. Snyder is an engineering expert retained by Baringer who is to testify on a variety of physical engineering issues pertaining to the construction work at the Garrison Greene development site. Plaintiffs seek to preclude Mr. Snyder's testimony regarding: 1) the affect *vel non* the stump removal activities had on the storm water runoff; 2) the affect *vel non* that any drains at Teleflex, Inc. had on flooding during Allison; 3) the affect *vel non* that the trash rack for

Bodenstein Creek had on flooding during Allison; 4) the origin of any dumpsters that were found in the Sandy Run Creek; and 5) opinions and conclusions of other defense experts.

Another engineering expert is Mr. Mills, who was retained by Brubacher. Mr. Mills will testify regarding construction engineering and construction work generally. Plaintiffs seeks to have Mr. Mills precluded entirely from testifying.

Finally, Defendants have retained Dr. Smith as an environmental engineer. Dr. Smith will discuss the causes of the flooding and the effects of Allison. Plaintiffs seek to preclude Dr. Smith's testimony regarding: 1) whether the flood flows upstream of the Fort Washington bridge had any causal connection to the collapse of the bridge; 2) whether the discharge from the Garrison Green site was an insignificant contribution to the flood discharges to the flood discharges at the SEPTA culvert; and 3) the storm data from creeks other than the Sandy Run Creek.

II. LEGAL BACKGROUND

Rule 702 of the Federal Rules of Evidence governs the testimony of expert witnesses and provides that such testimony is permitted if it will "assist the trier of fact to understand the evidence or to determine a fact in issue." FED. R. EVID. 702. Rule 702 embodies three distinct substantive restrictions on the admission of expert testimony: qualifications, reliability, and fit. Oddi v. Ford Motor Co., 234 F.3d 136, 145 (3d Cir. 2000); Elcock v. Kmart Corp., 233 F.3d 734, 741 (3d Cir. 2000); In re Paoli Railroad Yard PCB Litig., 35 F.3d 717, 742 (3d Cir.1994). The requirements of Rule 702 "mandate[s] a policy of liberal admissibility." Paoli, 35 F.3d at 741. In other words, the role of a district court is to only exclude expert testimony that clearly does not meet the requirements of Rule 702.

Pursuant to Rule 702, the Court must first determine whether the witness is qualified by virtue of “specialized knowledge” regarding the area of the proposed testimony. “The basis of this specialized knowledge ‘can be practical experience as well as academic training and credentials.’” Waldorf v. Shuta, 142 F.3d 601, 625 (3d Cir. 1998). The Court of Appeals for the Third Circuit has interpreted the specialized knowledge requirement liberally. Id. It would be an abuse of the trial court's discretion to exclude testimony “simply because the trial court does not deem the proposed expert to be the best qualified or because the proposed expert does not have the specialization that the court considers most appropriate.” In re: Unisys Savings Plan Litigation, 173 F.3d 145, 170 (3d Cir. 1999), cert. denied, Meinhardt v. Unisys Corp., 528 U.S. 950 (1999). However, “at a minimum, a proffered expert witness ... must possess skill or knowledge greater than the average layman....” Waldorf, 142 F.3d at 625, (quoting Aloe Coal Co. v. Clark Equip. Co., 816 F.2d 110, 114 (3d Cir. 1987), cert. denied, 484 U.S. 853 (1987)). This does not mean that an expert must rely solely on his own work, but he can rely on another's information or work, if it is of the type normally relied upon by an expert in the course of his work. United States v. Arias, 678 F.2d 1202, 1206 (4th Cir. 1982), cert. denied, 495 U.S. 910 (1982); Polymer Dynamics, Inc. v. Bayer Corp., 2005 WL 1041197, at *2 (E.D. Pa. May. 4, 2005).

With regard to the second two factors, reliability and fit, the Supreme Court in Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), held that the district court is to act as a “gatekeeper” to evaluate whether an expert's testimony “rests on a reliable foundation and is relevant to the task at hand.” Daubert, 509 U.S. at 597. In assessing the “reliability” of the testimony, the factors to consider are: (1) whether a method consists of a testable hypothesis; (2)

whether the method has been subjected to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put. Oddi, 234 F.3d at 741 (citing Paoli, 35 F.3d at 742 n.8). “The test of admissibility is not whether a particular scientific opinion has the best foundation or whether it is demonstrably correct. Rather, the test is whether ‘the particular opinion is based on valid reasoning and reliable methodology.’” Oddi, 234 F.3d at 145-46 (quoting Kannankeril v. Terminix Int'l Inc., 128 F.3d 802, 806 (3d Cir. 1997)). In addition, even if the expert's methodology is found to be sufficient, to be admissible the testimony must also be found to assist the trier of fact. Paoli, 35 F.3d at 743. However, the district court should only determine if the expert testimony is sufficient to satisfy the requirements of Rule 702, not determine if the facts and assumptions of an expert are “overwhelming.” Stecyk v. Bell Helicopter Textron, Inc., 295 F.3d 408, 414 (3d Cir. 2002) (holding “[a] party confronted with an adverse expert witness who has sufficient, though perhaps not overwhelming, facts and assumptions as the basis for his opinion can highlight those weaknesses through effective cross-examination”).

The Daubert “gatekeeping” requirement was extended in Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137 (1999), to apply to “the testimony of engineers and other experts who are not scientists.” Kumho Tire, 526 U.S. at 141. The requirements apply “not only to testimony based on scientific knowledge, but also to testimony based on technical and other specialized knowledge.” Id. When considering non-scientific expert testimony, the district court may

consider one or more of the factors set forth in Daubert, when doing so will help determine the reliability of the expert. Id.

III. DISCUSSION

A. Motion to Preclude Expert Testimony of Rocco Vespe, P.E.

Plaintiffs seek to offer Mr. Vespe as a construction engineer who will testify to a variety of issues related to the construction work at the Garrison Greene development site. The specific testimony at issue is Mr. Vespe's conclusion that the clearing and grubbing performed by Baringer "created a stormwater runoff situation that was conducive to increasing flood conditions" and that the act of clearing and grubbing prior to construction of the detention basin "was contrary to accepted construction practices."

Baringer argues that Mr. Vespe's expertise is not hydrology, so he cannot speak as to the impact on water runoff by the clearing and grubbing as performed. Plaintiffs do not dispute that Mr. Vespe is not an expert in hydrology, but argue that potential for water runoff is within the knowledge and expertise of a construction engineer. Plaintiffs cite to Tormenia v. First Investors Realty Company, Inc., 251 F.3d 128 (3d Cir. 2000), which recognized a "liberal standard" under Rule 702 for admission of expert testimony. Tormenia, 251 F.3d at 136. In Tormenia, the Court of Appeals for the Third Circuit affirmed the trial court's admission of a mechanical engineer who was testifying regarding revolving doors, a topic in which he did not have extensive training. Id. The Court of Appeals noted that the mechanical engineer's "experience with mechanical devices that employ the same principals at issue here was found sufficient to qualify him as an expert witness." Id.

In the present cases, the Court finds that Mr. Vespe, while not an expert in hydrology, has

provided the necessary support to show he is qualified to testify on the impact the construction had on water runoff. Mr. Vespe's proposed testimony does not include discussion of the impact the increased runoff had on SEPTA's bridge, only that the clearing and grubbing in this situation increased the water runoff. Given the narrow scope of Mr. Vespe's testimony, Mr. Vespe's extensive experience with construction engineering, and the liberal standards under Rule 702, the Court finds that Mr. Vespe should be allowed to testify on the effect clearing and grubbing had on water runoff.

Baringer also argues that Mr. Vespe's testimonial topic of "accepted construction practices" is too vaguely defined a term. Baringer asserts that the use of such a generic term as "accepted construction practices" without defining it or without citing to authorities that define the term is grounds for exclusion. See In re Baby Food Antitrust Litigation, 166 F.3d 112, 135 (3d Cir. 1999) (quoting Brooke Group, Inc. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 242 (1993)) (holding that an expert opinion that relies on "meager superficial information" is "highly speculative, unreliable, and of dubious admissibility").

Plaintiffs respond to this argument by citing to the documentary support of Mr. Vespe's conclusion, namely, the subcontract between Baringer and The Nolen Group, Inc., the construction plans, Pennsylvania Department of Environmental Protection permits, and applicable laws. Mr. Vespe apparently relied upon all of this information in forming his conclusion that Baringer violated "accepted construction practices." Although Baringer may be correct in arguing that Mr. Vespe has not produced "overwhelming" evidence to support his conclusion, the factual support for his conclusions are certainly not "meager superficial information" and are sufficient for the purposes of Rule 702.

In light of the liberal standards under Rule 702 and Plaintiffs' citation to sufficient record evidence to show a legitimate basis for Mr. Vespe's opinion, the Court finds that Mr. Vespe can testify on Baringer's alleged violations of "accepted construction practices." Thus, the Court denies Baringer's Motion to Preclude the Testimony of Rocco Vespe, P.E.

B. Motion In Limine to Preclude Plaintiffs' Expert Roger Ruggles, Ph.D.

Brubacher³ requests that certain testimony of Roger Ruggles, Ph.D., the Plaintiffs' hydrology expert, should be ruled inadmissible. Specifically, Brubacher asserts that Dr. Ruggles should not be allowed to testify as to: 1) total rainfall produced over the Sandy Run drainage basin during Floyd in September 1999 and Allison in June 2001; 2) peak storm water runoff flow from the Garrison Greene site during Allison; 3) any opinion testimony employing or based on his laboratory model study; 4) any opinion testimony employing or based on his animation; and 5) any opinion testimony regarding causation.

1. Dr. Ruggles's testimony regarding rainfall and runoff flow calculations

Brubacher contends that Dr. Ruggles is neither a meteorologist nor an expert in the field of meteorology, so he should not be allowed to offer opinions as to total rainfall over the Sandy Run drainage basin during Floyd and Allison. Brubacher further argues that Dr. Ruggles's methodology in calculating the rainfall was unsound. According to Brubacher, Dr. Ruggles's method of determining total rainfall is based solely on interpolating data from rainfall gauges, and it does not make use of data from Doppler weather radar. Brubacher cites to Mr. Wistar, the

³ Baringer filed a Response to this Motion joining in the Motion. Therefore, in this section when the Court refers to the arguments of Brubacher, it can be assumed that Baringer is joining in the same arguments.

defense's meteorological expert, who critiques heavily Dr. Ruggles's analysis.

Brubacher next argues that Dr. Ruggles's method of calculating peak runoff flow is scientifically unsound. Brubacher cites to its expert, Christopher Wallen, who opines that the accepted method of calculating peak runoff flow is by way of a formula that employs three variables: the area of the drainage basin, the infiltration coefficient of the land in the drainage basin, and the peak rainfall intensity over the drainage basin. Dr. Ruggles, according to Brubacher, did not use this third variable, peak rainfall intensity. For Dr. Ruggles's peak runoff flow of 120 cubic feet per second to be accurate (which is two times greater than the estimate using the alleged "proper" calculation and "proper" analysis of the data), Brubacher contends the peak rainfall number would be 11 inches per hour, which is three times greater than any estimated peak rainfall intensity based on the weather data available in this case. Thus, Brubacher asserts that Dr. Ruggles's analysis of peak storm water runoff is unsound and he should not be allowed to testify on this issue

Plaintiffs respond to these arguments with a discussion of the "liberal standards" for assessing the qualifications of an expert. Tormenia, 251 F.3d at 136. Plaintiffs go on to argue that civil engineers routinely make calculations that estimate the total rainfall produced over a drainage basin, citing to Ruggles Declaration, ¶ 6 (a declaration produced to respond to Brubacher's motion). Plaintiffs again cite Dr. Ruggles, who states that analyses such as these are fundamental components of courses in hydrology and water resources. In fact, Plaintiffs refer to text books on water resource engineering, in which Dr. Ruggles has been trained, that have chapters on "Computation of Average Precipitation" and "Precipitation," and a subchapter on "Measurement at a Point" and "Areal Estimation."

Additionally, Plaintiffs argue that Dr. Ruggles's method of calculating peak runoff flow was sound. Specifically, Plaintiffs note that Dr. Ruggles used a method developed by the United States Department of Agriculture and released as a software computer model entitled Technical Release 55 (TR-55). According to Plaintiffs, this method of measuring peak discharge in small watersheds is frequently used by engineers to determine peak discharge from areas in order to design hydraulic structures and therefore is a widely accepted method of estimating peak storm water runoff. Plaintiffs also note that Andersen Engineering used the TR-55 program when preparing its design of the proposed detention basin, as did Mr. Snyder, the Defendants' engineering expert, in estimating the storm water runoff from the Garrison Greene site. Plaintiffs assert that the use of a method by opposing experts gives additional credence to the reliability of the proffered testimony. Correa v. Cruisers, 298 F.3d 13, 26 (1st Cir. 2002). Plaintiffs concede that the TR-55 method does not use peak rainfall intensity, but argues that is irrelevant because the TR-55 method is clearly accepted and reliable. Finally, Plaintiffs argue that the calculations cited by Brubacher that the 120 cfs flow would require 11 inches of rain per hour is inaccurate, since peak flow is calculated at a time concentration of 6 minutes, so a high intensity short duration rainfall could also produce a peak flow of this magnitude.

As discussed above, the Court is to employ a "liberal standards" for qualification of an expert. It is not the Court's role at this stage to determine either the credibility or the accuracy of an expert's conclusions. Rather, the "gatekeeper" merely asks whether an expert has met the requirements of Rule 702. The disputes at issue in this litigation raise questions of competing methodologies and which of the methodologies is more "reliable." The Court will not and should not make these determinations but only whether Plaintiffs have sufficiently demonstrated

that Dr. Ruggles's methodologies meet the liberal standard of reliability required by Rule 702. The Court finds the record facts cited by Plaintiffs are sufficient to allow Dr. Ruggles to testify as to the total rainfall during Tropical Storms Allison and Floyd and the peak storm water runoff flow from Garrison Greene.

2. Dr. Ruggles's use of models

Brubacher next argues that any opinions or conclusions derived from Dr. Ruggles's use of a "laboratory model" or computer model should be precluded. Brubacher claims that Dr. Ruggles does not show that these models accurately represent what they purport to represent and he does not show the methods he employed in connection with his use and development of the models were such that they led to a scientifically sound simulation of the events he intended to simulate or re-create.

Regarding the "laboratory model," Brubacher's expert Mr. Wallen opines that Dr. Ruggles has not provided the physical measurements of the laboratory model dimensions or the flow used in the model study, so it is impossible to do a reasonable assessment of the validity of any of the conclusions. Mr. Wallen states that there is no indication that any calibration of the physical model was conducted; the model does not take into account the channel bottom roughness of the stream, which could affect the simulated water surface elevations; and the model's relationship of depth versus flow is not presented. As to the computer model, Mr. Wallen states that "we could find no data of discussion that demonstrates any real relationship between the physical Garrison Greene site and the site represented by the animation... the animation is simply a cartoon without any technical basis."

Plaintiffs respond by noting that the Court of Appeals for the Third Circuit only requires

an experiment to be substantially similar to the actual conditions, not identical. Stecyk, 295 F.3d at 412 (“Experimental evidence may be admitted even if conditions do not perfectly correspond to the conditions at issue in litigation; dissimilarities may affect the weight of the evidence, but not its admissibility”). Additionally, Dr. Ruggles, according to Plaintiffs, has considerable experience in the construction and use of models like the one he proposes to use here, and these past models have received approval from peer review. Plaintiffs also contend that the specific concerns expressed by Mr. Wallen are not valid (1) due to Dr. Ruggles having produced design drawings that showed the model’s planned dimensions and other information; (2) with respect to calibration, exact calibration is only needed to obtain a specific number, but Dr. Ruggles’s goal, which he accomplished, was to obtain a reasonable range of numbers; and (3) Dr. Ruggles stated in his deposition that he did take account of the bottom roughness and believes his model’s roughness was “somewhat in the same category” as the bottom roughness of Sandy Run Creek. Finally, Plaintiffs noted that the existence of this model has been known by Brubacher and the other defendants since September 2003, yet none of the Defendants or their experts have inspected the model.

As for the computer model, Plaintiffs argue that the animation is not a basis for Dr. Ruggles’s opinions, but rather is a demonstrative piece that demonstrates his opinions. Plaintiffs also note that, although Dr. Ruggles did not actually design the animation, he reviewed it and even recommended changes so that it accurately represents his opinions of the series of events. Finally, Plaintiffs assert that the animation is a substantially similar representation of the area in question, so there is no legitimate basis to claim the animation should be precluded.

Under the requirements set forth in Stecyk and Glick v. White Motor Co., 458 F.2d 1287

(3d Cir. 1972), a model or test is admissible if the evidence produced shows that it is “substantially similar” to the conditions being modeled or tested. Stecyk, 295 F.3d at 412; Glick, 458 F.2d at 1294. The evidence presented by Brubacher does not show how the models were not “substantially similar” to the conditions at Garrison Greene and the SEPTA bridge. The criticisms by Brubacher’s expert, Mr. Wallen, are either too broad to demonstrate that the models are not “substantially similar” or too specific and fact sensitive to be properly addressed by the Court at this stage. Rather, these are the kind of challenges that are more appropriate for cross-examination. As such, the Court finds that Dr. Ruggles can testify as to his opinions or conclusions derived from either of the models.

3. Regarding causation

Brubacher argues that Dr. Ruggles should not be allowed to present testimony on causation. Brubacher asserts that Dr. Ruggles has not made any determination as to what runoff level would *not* have caused SEPTA’s bridge to collapse and is, therefore, unable to offer any opinion as to whether a reduction of the water runoff would have prevented flooding. Therefore, Brubacher contends that Dr. Ruggles should be precluded from offering any opinion testimony that excessive runoff caused the collapse and flooding. Additionally, Brubacher notes that Dr. Ruggles has conceded he has not done any analysis to determine if the detention basin would have prevented the collapse. Therefore, Dr. Ruggles, according to Brubacher, should be precluded from discussing the impact of the failure to construct a detention basin had on the flood.

Plaintiffs argue that, under Pennsylvania law, causation for common law negligence claims is determined by a “substantial factor” test. Ford v. Jeffries, 379 A.2d 111, 114 (Pa.

1977). Thus, according to Plaintiffs, Dr. Ruggles is not testifying that the lateral flow from the Garrison Greene site was the only cause, but that it was a “substantial factor” in the flooding. Plaintiffs hasten to explain that Dr. Ruggles was not attempting to determine at what runoff flow number the bridge would have collapsed, only whether the failure to build a detention basin increased the flow rate and if that increased flow rate was a “substantial factor” in the erosion that allegedly led to the collapse of the bridge. Finally, Dr. Ruggles did not make independent calculations as to the detention basin, but, instead, relied upon Andersen’s calculations for its Erosion and Sedimentation plan.

Again, given the narrow role of the Rule 702 “gatekeeper,” the Court must refrain from determining if a *more* reliable method or approach exists. That is an advocate’s job. Instead, the Court evaluates whether the expert opinion meets the requirements of Daubert and its progeny. One of these requirements, and the one at issue, is whether the opinion is reliable.⁴ Given the indulgent standard used for requirement for reliability, the Court finds that Brubacher has not demonstrated that Dr. Ruggles testimony is unreliable. Further, the information relied on by Dr. Ruggles, namely the calculations in the Erosion and Sedimentation plan, are of a type that an expert in hydrology reasonably would rely upon. Therefore, the Court finds that Dr. Ruggles’s testimony as to causation meets the requirements of reliability and is admissible in this matter.

B. St. Paul’s and Zurich’s Motion

Plaintiffs are seeking to preclude the testimony in whole or in part of four experts, namely, Messrs. Wistar, Snyder, Smith, and Dr. Mills.

⁴ Brubacher does not argue that Dr. Ruggles is not qualified as an expert in hydrology, nor does Brubacher argue that this opinion does not “fit” these matters.

1. Stephen M. Wistar

Mr. Wistar has been identified by the Defendants as a meteorological expert. Mr. Wistar charts the return interval of tropical storms Floyd and Alison in Fort Washington and two miles east of Fort Washington. (Wistar Expert Report at 7). Return intervals are the estimated time in between storms of a particular magnitude (i.e. a 100 year storm should occur every 100 years). However, Plaintiffs assert that Mr. Wistar admitted in his deposition that he obtained the information on these return intervals from his friend, Rob Kelly, a statistician. (Deposition of Wistar at 29, l. 1 through 30, l. 5; 32, ll. 21-22). Plaintiffs further claim that Mr. Wistar did not have any personal knowledge concerning what methodology Mr. Kelly used to arrive at the return intervals. (Deposition of Wistar at 30, ll. 22-25). Although Plaintiffs cite to portions of the deposition, they failed to provide the transcript to the Court.

Plaintiffs argue that the proposed testimony regarding the return intervals will be impermissibly based on the hearsay of someone in another field of science who has not been disclosed as an expert. They cite to Dura Automotive Systems of Indiana, Inc. v. CTS Corp., 285 F.3d 609 (7th Cir. 2002), for support of this proposition. In Dura, the Court of Appeals for the Seventh Circuit held “[t]he Daubert test must be applied with due regard for the specialization of modern science. A scientist, however well credentialed he may be, is not permitted to be the mouthpiece of a scientist in a different capacity.” Id. at 614. Plaintiffs argue that Mr. Wistar is being used as a “mouthpiece” for Dr. Kelly, who has not produced either an expert report or a curriculum vitae. Plaintiffs contend that the “mouthpiece” role is not allowed for an expert.

Defendants Brubacher and Baringer argue that Mr. Wistar’s proposed testimony regarding storm return intervals will be based on sound reasoning and sound methodology. They

contend that storm return values are derived from statistical analysis and, naturally, meteorologists commonly turn to statisticians to compute the values. Defendants assert that because Mr. Wistar was following a common practice for his field, and because Dr. Robert E. Kelly is a recognized statistician, Mr. Wistar's testimony will be proper. Defendants have also expressed a willingness to provide Dr. Kelly as a witness to determine if he used sound methodology.

Under Rule 703, an expert may rely on any facts or data "of a type reasonably relied upon by experts in the particular field in forming opinions." Rule 703 explicitly includes facts or data that is not admissible itself, and prohibits these facts or data from being presented to the juror by the proponents of the opinion, but it does not preclude experts from basing their opinions on inadmissible facts or data. Cases have recognized that an expert may rely on the work of others, but the expert must be able to testify to the veracity of that work. See, e.g., McReynolds v. Sodexo Marriot Services, Inc., 349 F. Supp. 2d 30, 37 (D.D.C. 2004) (holding the expert statistician did not need to personally write the computer code or even be a master of the program to rely on it when he testified that "[w]hen I review the computer output I am able to determine if the programming was performed as I requested and if any significant mistakes were made in the programming"); Astra Aktiebolag v. Andrx Pharm., Inc., 222 F. Supp. 2d 423, 492 (S.D.N.Y. 2002) (finding the expert could testify about work done by colleagues that was based on the expert's designs).

The Court certainly acknowledges that an expert cannot simply be the mouthpiece of another expert, but that is not the case with Mr. Wistar. Mr. Wistar relied upon a statistician to do the mathematical calculations from Mr. Wistar's findings. There is no evidence that Dr. Kelly

developed an original statistical model or provided any more assistance than that which could have been done by a computer. It seems clear that Mr. Wistar's reliance is of the type normally relied upon by numerous experts, including meteorologists, in the course of their work.

Therefore, the Court finds no basis for excluding any of the testimony of Mr. Wistar whose reliance on Dr. Kelly's calculations was reasonable under Federal Rule of Evidence 703.

2. Jerry K. Snyder, P.E.

Plaintiffs challenge four of Mr. Snyder's conclusions. Because the first four arguments are closely linked, the Court will address all these arguments together.

i. Mr. Snyder's alleged unsubstantiated assumptions

Plaintiffs first argue that Mr. Snyder's opinion on root raking should not be allowed, because the actual calculations he uses to show that root raking would decrease the peak runoff rate is actually based on chisel plowing. (Snyder Expert Report at p. 7). Mr. Snyder states in his report that he assumes root raking activities is similar to chisel plowing. (Snyder Expert Report at p. 7). Plaintiffs contend that this unsubstantiated assumption is not reasonably relied upon by experts in the engineering field. Further, Plaintiffs assert that Mr. Snyder's statement in his expert report that "stump removal activities could have either increased or decreased runoff from the site" (Snyder Expert Report at p. 7) is also inadmissible, because it is improper speculation. See Schulz v. Celotex Corp., 942 F.2d 204, 208 (3d Cir. 2001) (holding that, although specific terms of certainty are not required in federal court, the expert must testify that his or her opinion is sufficiently certain for the opinion to be admissible).

Second, according to Plaintiffs, Mr. Snyder cannot testify that possibly clogged drains at Teleflex could have contributed to flooding there. Plaintiffs contend that Mr. Snyder's statement

in his expert report that “[i]t is possible that the clogged drains could be partially responsible for the additional severity” (Snyder Expert Report at p. 4-5) of the flooding is improper speculation and not allowed. Schulz, 942 F.2d at 208. However, Mr. Snyder concedes that he did not have an opportunity to examine the drains, so he cannot say with any more certainty if the drains caused or contributed to the flood. Therefore, Mr. Snyder should be prohibited from discussing what affects the drains could have had on the flooding at Teleflex.

Third, Mr. Snyder stated in his report that a trash rack to hold back debris from Bodenstein Creek could have become blocked with debris and “could cause Bodenstein Creek to flood Commerce Drive.” (Snyder Expert Report at p. 12). Mr. Snyder conceded that he did not know whether there was, in fact, debris in the trash rack prior to the storm. Plaintiffs argue that this is improper speculation, and Mr. Snyder should be prevented from opining on this issue.

Finally, Plaintiffs feel that Mr. Snyder’s statement in his expert report is improper speculation, because he states that dumpsters found in Sandy Run Creek “could have come from any businesses along the south side of Penn Avenue since each business has one or more dumpsters that could be washed into Sandy Run Creek.” (Snyder Expert Report at p. 11).

Baringer claims that the foregoing of Mr. Snyder’s statements are being taken out of context. Specifically, Mr. Snyder stated that the root raking would “greatly decrease” the peak runoff rate if it is similar to chisel plowing, and that soil type, moisture, slope, soil compaction, and roughness all have an effect on the peak runoff rate after grubbing, so Mr. Snyder’s statement about the effect “could have” increasing or decreasing is an admission that other factors are at play. Further, Plaintiffs have the opportunity to test the assumption that root raking and chisel plowing are similar during cross-examination. See Stecyk v. Bell Helicopter Textron,

Inc., 295 F.3d 408, 414 (3d Cir. 2002) (holding that expert testimony must be based on assumptions with factual foundation in the record, but “the burden of exploring the facts and assumptions underlying the testimony of an expert witness [rests] on opposing counsel during cross-examination”)

Baringer also argues that a defense expert need not testify to a reasonable degree of certainty when rebutting the testimony of plaintiffs’ expert as to the cause of a loss.

See Holbrook v. Lykes Bros. Steamship Co., Inc., 80 F.3d 777, 786 (3d Cir. 1996) (finding that expert testimony of a defense expert was admissible, despite being insufficient to prove the cause of the injury, because it was sufficiently certain on rebuttal and could help the jury on this issue). Mr. Snyder makes these statements to rebut Dr. Ruggles’s claim that there is no alternative explanation for the flooding other than the collapse of SEPTA’s bridge. Mr. Snyder cites to letters dated December 4, 2001 and January 17, 2002 from Teleflex that described clogged drains that required extensive work. (Snyder Expert Report at p. 4). Mr. Snyder has examined the trash racks of Bodenstein Creek, but cannot testify to their condition prior to the storm. (Snyder Expert Report at p. 12). Mr. Snyder in his March 9, 2005 letter prepared for the response to this Motion stated that he mentioned the dumpster and other debris in the Sandy Run Creek to mention other sources besides the Garrison Greene site that Dr. Ruggles claimed was the only source. Further, Mr. Snyder states in the March 9, 2005 letter that no building material had been delivered to the Garrison Greene site by the time of the storm and that, even if some debris came off the site, it could not have ended up on the opposite bank “because the velocity of the water flowing in Sandy Run was too great.”

The Court finds that the arguments of Plaintiffs in this matter are without support.

Plaintiffs narrowly look at sections of an expert report while ignoring the overall conclusion in it. In this case, Mr. Snyder is opining that the tree and stump removal at Garrison Greene was not the cause of the collapse of the bridge. The other information being challenged are either statements in rebuttal to Dr. Ruggles's conclusions or are assumptions that underlie Mr. Snyder's overall conclusion. Both the rebuttals and underlying assumptions of Mr. Snyder are issues that can be challenged during cross-examination, but they are not conclusions of a nature that should be excluded for lacking certainty.

iv. Improper Mouthpiece

Plaintiffs argue that Mr. Snyder makes repeated references to the opinions of other experts that he adopts as his own without having made any effort to test their validity. Plaintiffs again cite to Dura Automotive Systems of Indiana v. CTS Corp., 285 F.3d 609, 614 (7th Cir. 2002) as support that an expert cannot simply serve as the "mouthpiece" of another person. Specifically, Plaintiffs note that Mr. Snyder relied on the expert report of James Smith and Eric Wood for the estimated flow rate through the SEPTA bridge and relied on Mr. Wistar's report for the spatial variations in rainfall amounts known to have occurred. (Snyder Expert Report at pg. 7, 9).

Baringer concedes that an expert cannot simply be a "mouthpiece" for another expert, but contends that the information relied on by Mr. Snyder in his report is the type regularly relied upon by engineering experts. Specifically, Mr. Smith is a hydrologist (as is Mr. Snyder) and Mr. Wistar is a meteorologist. Further, both of these experts will be at trial, and Plaintiffs will have an opportunity to challenge any of their data or conclusions. Baringer argues that, because the reliance by Mr. Snyder on these other experts was reasonable, Mr. Snyder should be allowed to

testify on his conclusions that have as one of their sources another expert's data or conclusions.

The Court finds that Mr. Snyder's reliance on other experts, including the Plaintiffs' experts, was reasonable and of a type normally relied upon by experts in his field during the course of their work. Therefore, the Court finds no basis to exclude the portions of Mr. Snyder's testimony that are alleged to be his serving as a "mouthpiece."

3. Joseph B. Mills, P.E.

Mr. Mills is an engineering expert retained by Brubacher. Mr. Mills stated in his expert report that Brubacher was not a decisionmaker or in control of Garrison Greene and that none of the actions of Brubacher caused or contributed to the flooding. (Mills Expert Report at p. 7). Plaintiffs argue that, because Mr. Mills conceded in his deposition that the sole basis for his opinion as to the "recognized principles of engineering and construction" is his personal experience and nothing more, Mr. Mills's opinions are based solely on his subjective belief. Plaintiffs assert that an expert opinion requires more than "credentials and a subjective opinion." Paoli, 35 F.3d at 761 n.32 (quoting Viterbo v. Dow Chem. Co., 826 F.2d 420 (5th Cir. 1987)). Therefore, Plaintiffs contend that Mr. Mills should be precluded from testifying at trial.

Brubacher argues that Plaintiffs' argument is completely unfounded, since an expert may testify based on personal knowledge and/or practical experience in his field, particularly when his testimony concerns matters relevant to an applicable standard of care, which is essentially what Mr. Mills testimony concerns in this case. Schneider v. Fried, 320 F.3d 396, 408 (3d Cir. 2003).

The series of questions that led to Mr. Mills's response at issue is:

Q: What recognized principles of engineering and construction are you making reference to?

A: Again, it is based upon my experience of the normal process, the flow of

information, the flow of when construction execution occurs.

Q: Is it based upon anything other than your personal experience?

A: No.

(Deposition of Mr. Mills at 54, ll. 10-19)

This series of questions is similar to the facts in Schneider, where a doctor testified to the standard of care followed in his practice, but that he also had formed an opinion as to the legal standard of care for doctors in his profession, and he was following that standard of care. In other words, Schneider recognizes a situation like this matter, where the expert is testifying to a legal standard of care, but relies heavily on his own personal experience. Therefore, the Court finds that, under Schneider, Mr. Mills is qualified to give his proposed opinion.

The Court also notes that the Plaintiffs' argument regarding Mr. Mills is substantially the same as one of the arguments made by Baringer in its Motion, discussed *supra* in Subsection A. Although Plaintiffs' counsel has done excellent hermeneutical gymnastics to attempt to distinguish the arguments, the Court reminds the parties of the old adage "what's good for the goose is good for the gander."

4. James A. Smith, Ph.D.

Dr. Smith is an environmental engineer retained by the Defendants.

i. Flood velocities could have eroded the bridge abutment

Plaintiffs cite to the following statement, which they argue is improper speculation by Dr. Smith.

Given the higher magnitude of the flood flows during June 2001 compared to September 1999, the higher subsequent flow velocities, and the geomorphology of the Sandy Run channel immediately upstream of the SEPTA culvert, it seems reasonable the flood velocities during June 16-17, 2001 event could erode the culvert abutment. (Dr. Smith's Expert Report, at 10).

Plaintiffs also contend that, because Dr. Smith does not know the exact time of the bridge's collapse, he could not have performed calculations of the flow rate at the time the bridge collapsed. As such, the calculation of a peak flow rate at midnight, which was the time Dr. Smith assumed was around when the bridge collapsed, is not relevant to this case. Therefore, Plaintiffs argue that Dr. Smith should be prohibited from testifying that flood flows upstream of the bridge had any causal connection to its collapse.

Defendants respond first that a defense expert is not held to the same standard when offering opinions supporting a defense rebuttal of a plaintiff's claims, so Dr. Smith's opinion on this issue is appropriate. See Holbrook, 80 F.3d at 786 (finding that expert testimony of a defense expert was admissible, despite being insufficient to prove the cause of the injury, because it was sufficiently certain as to rebuttal and could help the jury on this issue); Neal v. Lu, 530 A.2d 103, 110 (Pa. Super. Ct. 1987) (holding that a defense expert's testimony is allowed when the expert may not speak with certainty to the cause, but does speak with certainty that the cause asserted by plaintiff's expert is not the actual cause). Defendants also argue that, although Dr. Smith does not know the exact moment of collapse, his comparisons of flow rate are based on the rough time period when the collapse is presumed to have occurred based on the record evidence. Finally, because Plaintiffs have not argued the methodology or the calculations of Dr. Smith are in any way unreliable, Defendants assert that Dr. Smith should be allowed to testify.

Although the Defendants appear to be understating somewhat the burden on a defense expert to be sufficiently certain, it is not an issue here, where Dr. Smith speaks with certainty that Dr. Ruggles's argument that the lateral flow from Garrison Greene was the cause of the bridge's collapse is not accurate, but that the water flow alone could have been the cause. Therefore, the

Court finds that Dr. Smith can testify in rebuttal about the flood velocities. Additionally, the assumption of time of the collapse of the bridge is based on sufficient record facts to satisfy the reliability requirement.

ii. Garrison Greene discharges were an insignificant contribution to the flood discharge at the bridge

Plaintiffs cite to calculations made by Dr. Smith regarding the peak discharge rate from the Garrison Greene site and the flood discharge from the Sandy Run Creek. (Smith Expert Report at 10). These rates were compared by Dr. Smith and he opined that “[t]he discharge from the Garrison Greene site was an insignificant contribution to the flood discharges estimated at the SEPTA culvert.” (*Id.*). Plaintiffs argue that these calculations, and the methodology used, is critically flawed, because it compares peak rates from the Garrison Greene site and peak rates from the Sandy Run Creek. However, Plaintiffs point out, Dr. Smith does not know when the peak rates occurred, or what the actual rates were when the bridge collapsed.

Defendants argue that the Plaintiffs’ claims are unfounded because Dr. Smith based his calculations of rates on the record evidence of the loose timeframe when the bridge collapsed. Although Defendants concede that the exact moment and the exact rate of discharge at that moment from Garrison Greene and the flood rate are unknown, Defendants argue that Dr. Smith’s calculations are not speculation, but reasonable estimates of the rates at the time of the collapse. Therefore, Defendants assert that Dr. Smith’s testimony on this issue should be allowed for the jury’s consideration.

Once again, the Court is faced with an argument about what would be the best or more reliable calculation and, once again, the Court will note that its role is that of a gatekeeper, not an

evaluator of the methodologies. While Dr. Smith's use of estimates may provide cross-examination material for counsel, it does not significantly undermine the reliability of Dr. Smith's opinion to justify the Court's exclusion of his testimony.

iii. Storm data from outside the Sandy Run drainage basin

Plaintiffs contend that Dr. Smith's observations about storm information from Pennypack Creek, Little Neshaminy Creek, and Wissahickon Creek are irrelevant. Plaintiffs argue that this information does not relate to any issue at trial here, and its sole purpose is to amplify the magnitude of Tropical Storm Allison in comparison to Tropical Storm Floyd.

Defendants argue that the purpose of the testimony is to show the magnitude of the storm. Further, Defendants claim this a conventional method used in putting together a complete picture of storm magnitude at that particular location. However, Defendants concede that the rainfall in those areas had no affect on the flooding of the Sandy Run Creek.

As the magnitude of the storm is an issue at this trial, the Court finds that the information from the other drainage basins is relevant. The Court also notes that Dr. Ruggles relied on similar information in determining rainfall. Namely, Dr. Ruggles determined rainfall by interpolating numbers from rain gauges in the greater geographic region than merely the site at issue.

IV. CONCLUSION

For the foregoing reasons, the Court denies the Defendant Baringer's Motion in Limine to Preclude Certain Expert Testimony of Plaintiffs' expert, Rocco R. Vespe, P.E., Defendant Brubacher's Motion in Limine to Preclude Plaintiffs' Expert Roger Ruggles, Ph.D. from Offering Certain Expert Opinion Testimony at Trial, and Plaintiffs' Motion to Preclude the expert

testimony of Joseph B. Mills, P.E., and portions of the expert testimony of Stephen M. Wistar, Jerry K. Snyder, and James A. Smith, Ph.D. An Order consistent with this Memorandum follows.

BY THE COURT:

/S/

GENE E.K. PRATTER
UNITED STATES DISTRICT JUDGE

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

THE ST. PAUL FIRE AND MARINE	:	CIVIL ACTION
INSURANCE COMPANY,	:	
Plaintiff	:	
	:	
v.	:	
	:	
THE NOLEN GROUP, INC., et al,	:	
Defendants	:	NO. 02-8601 (lead consolidated case)

ZURICH AMERICAN INSURANCE	:	CIVIL ACTION
COMPANY,	:	
Plaintiff	:	
	:	
v.	:	
	:	
THE NOLEN GROUP, INC., et al,	:	
Defendants	:	NO. 03-3192 (consolidated case)

FEDERAL INSURANCE COMPANY, et al,:	:	CIVIL ACTION
Plaintiffs	:	
	:	
v.	:	
	:	
THE NOLEN GROUP, INC., et al,	:	
Defendants	:	NO. 03-3651 (consolidated case)

ORDER

Gene E.K. Pratter, J.

May 13, 2005

AND NOW, this 13th day of May, 2005, upon consideration of Defendant Warren W. Baringer, Jr.'s Motion in Limine (Docket No. 100) and the responses thereto, Defendant Brubacher Excavation, Inc.'s First Motion in Limine (Docket No. 103) and the responses thereto, Plaintiffs' Motion to Preclude Expert Testimony Pursuant to Daubert (Docket No. 104) and the responses thereto, and the testimony and arguments presented at the hearing and oral argument

on April 20, 2005 and April 27, 2005, it is hereby ORDERED that:

1. Defendant Warren W. Baringer, Jr.'s Motion in Limine (Docket No. 100 (lead case)) is DENIED;
2. Defendant Brubacher Excavation Inc.'s First Motion in Limine (Docket No. 103 (lead case); Docket No. 50 (03-3192); Docket No. 39 (03-3651)) is DENIED; and
3. Plaintiffs' Motion to Preclude Expert Testimony Pursuant to Daubert (Docket No. 104 (lead case); Docket No. 41 (03-3651)) is DENIED.

BY THE COURT:

/S/ _____
GENE E.K. PRATTER
UNITED STATES DISTRICT JUDGE