

D'AMATO LAW FIRM

**By: Paul R. D'Amato, Esquire - NJ ID# 006901974
Kasi M. Gifford, Esquire - NJ ID# 152582015**

2900 Fire Road, Suite 200
Egg Harbor Township, New Jersey 08234
609-926-3300
Attorney for Plaintiffs

**SANDRA SMITH, INDIVIDUALLY
AND AS EXECUTRIX OF THE
ESTATE OF GEORGE BRADLEY
SMITH, AND AS GUARDIAN AD
LITEM FOR HER CHILDREN KOLE
SMITH AND BRANDY SMITH,
NICOLE GAETA, KYLE SMITH;**

Plaintiffs,

-vs-

**CITY OF NORTH WILDWOOD,
STATE OF NEW JERSEY;**

Defendants.

SUPERIOR COURT OF NEW JERSEY
CAPE MAY COUNTY - LAW DIVISION

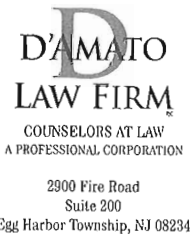
DOCKET NO.

Civil Action

**ORDER TO SHOW CAUSE FOR
INJUNCTIVE RELIEF**

THIS MATTER having been opened to the Court by Paul R. D'Amato, Esquire and Kasi M. Gifford, Esquire on behalf of Plaintiffs Sandra Smith, individually and as Executrix of the Estate of Her Late Husband George Bradley Smith, and as Guardian ad Litem for her children Kole Smith and Brandy Smith, and Nicole Gaeta and Kyle Smith, the adult children of George Bradley Smith, upon Plaintiffs' Verified Complaint in support of their application for an order to show cause for accelerated discovery; upon notice having been given to Defendants, City of North Wildwood, and the State of New Jersey, the Court having considered the pleadings filed herein, and good cause being shown;

IT IS on this _____ day of October, 2016 ORDERED AND ADJUDGED that Defendants The City of North Wildwood and the State of New Jersey appear and show cause before the Superior Court at the _____ County Court House located at _____ at _____ o'clock on the _____ day of October, 2016 why a



permanent injunction should not be issued permanently enjoining and restraining Defendants the City of North Wildwood and the State of New Jersey from allowing access to the Unprotected Inlet Beaches, reaching north of 1st Avenue and Surf Avenue until Spruce Avenue and the Beach at the sea wall.

IT IS FURTHER ORDERED that:

A. A copy of this filed Order to Show Cause, the Verified Complaint, and Supporting brief shall be served upon Defendants via Lawyers Service within ___ days of the date hereof.

B. Plaintiffs must file with the Court its proof of service of the pleadings on the Defendants or their counsel no later than _____ () days before the return date.

C. Defendants shall file and serve a written response to the Order to Show Cause and the request for entry of injunctive relief and proof of service by _____, 2016. The original documents must be filed with the Clerk of the Superior Court, Cape May County, Chancery Division. You must send a copy of your opposition papers directly to the Honorable Julio L. Mendez, A.J.S.C., whose address is _____.

D. Defendant should take notice that Plaintiffs have filed a lawsuit against you in the Superior Court of New Jersey. The Complaint attached to this Order to Show Cause states the basis of the lawsuit. If you dispute this Complaint, you, or your attorney, must file a written answer to the Complaint and proof of service within 35 days from the date of service of this Order to Show Cause; not counting the day you received it.

These documents must be filed with the Clerk of the Superior Court, Cape May County, Chancery Division, New Jersey. You must also send a copy of your Answer to Plaintiffs' attorney whose name and address appear above.

D
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COUNSELORS AT LAW
A PROFESSIONAL CORPORATION

2900 Fire Road
Suite 200
Egg Harbor Township, NJ 08234

Opposition to the Order to Show Cause is not an Answer and you must file both. Please note further: if you do not file and serve an Answer within 35 days of this Order, the Court may enter a default against you for the relief Plaintiffs has demanded.

E. The Court will entertain argument, and hear testimony, on the return date of the Order to Show Cause.

, A.J.S.C.

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October 4, 2016

Clerk, Law Division
Cape May County Superior Court
9 North Main Street
Cape May Court House, New Jersey 08210

RE: SMITH V. CITY OF NORTH WILDWOOD, ET AL.
OUR FILE NUMBER |3100-P

Dear Sir/Madam:

Enclosed you will find the following:

- (XX) An original and copy of the Verified Complaint
- (XX) Case Information Statement; and
- (XX) Self-addressed stamped envelope
- (XX) Brief
- (XX) Certification of Kasi M. Gifford, Esquire
- (XX) Certification of J. Richard Weggel, Ph.D., P.E., D.CE
- (XX) Certification of Michael C. Maslowski
- (XX) Order to Show Cause
- (XX) Table of Contents
- (XX) Thumb Drive Containing Exhibits

Would you please:

- (XX) File, and
- (XX) Return a filed copy

Please charge our Attorney Collateral Account for any related costs, #19125.

Thank you kindly for your time and attention to this matter.

Very truly yours,

Paul R. D'Amato

PAUL R. D'AMATO

Enclosures

cc w/enc.: Sandra Smith
Nicole Gaeta & Kyle Smith
Honorable Julio L. Mendez, A.J.S.C.

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-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

SUPERIOR COURT OF NEW JERSEY
CAPE MAY COUNTY - LAW DIVISION

DOCKET NUMBER: CPM-L-

A CIVIL ACTION

VERIFIED COMPLAINT

Plaintiffs Sandra Smith, individually and as executrix of the estate of her late husband George Bradley Smith (hereinafter "Brad Smith"), and as Guardian Ad Litem for Her Children Kole Smith and Brandy Smith, Nicole Gaeta, and Kyle Smith, the adult children of George Bradley Smith, residing in Pennsylvania, by way of Verified Complaint bring this action for injunctive relief seeking to have the North Wildwood beach in the area of Hereford Inlet permanently closed to the public from Surf Avenue and the beach to Spruce Avenue and the beach at the sea wall.

FACTS

1. At all times relevant, Defendants, the City of North Wildwood and the State of New Jersey, through their agents, servants, and/or employees, owned, operated, managed, controlled, and supervised the beaches along the North Wildwood Atlantic Ocean coast line, which include the Hereford Inlet Beach, the Inlet Beach, Moore's Beach, Moore's Inlet Beach, and the Point (hereinafter "Unprotected Inlet Beach"), and the bathers, sun bathers, strollers, and waders invited to visit and use those beaches.

2. On July 27, 2012, the decedent George Bradley Smith (hereinafter "Brad Smith"), his wife Sandra, his children Brandy and Kole went to the North Wildwood beach located at Surf Avenue. The Smiths were accompanied by Scott Sunderland, his wife, and their two young children. This beach was protected by lifeguards employed by the City of North Wildwood.

3. Brad Smith with his daughter Brandy, Scott Sunderland, and his two children decided to go for a walk which took them north along the shoreline.

4. To the North of the last lifeguard stand located at Surf Avenue is a beach referred to as the Inlet Beach, Moore's Beach, Moore's Inlet Beach, and the Point.

5. During this walk Brad Smith, Scott Sunderland, and their daughters encountered a drop off which was not visible because it was under the water.

6. Because of this drop off, which was as steep as a cliff, the Smiths and Sunderlands although only wading, suddenly fell into deep water which was far over their heads.

7. Scott Sunderland was able to return to land with his daughter on his back.

8. After reaching land, Scott Sunderland flagged down two jet skiers, one of whom was able to save Brandy Smith.

9. On April 1, 2016, Scott Sunderland at his deposition in a related companion case testified as follows:

Q: Okay. Now, from the time you started walking from the protected beach onto that area that was unprotected—well, let's go back a little bit. Going back to the day of the accident, before you decided to take the walk, as you have described many times today, towards Moore's Beach or Moore's Inlet, did you know that the area that you are walking—about to walk on was unprotected in the sense that there were no lifeguards down there?

A: No, we didn't.

Q: On the day of Brad's drowning, was that the first time that you and Brad had ever walked from the protected beach down towards Moore's Inlet or Moore's Beach?

A: Yes, that was the first time we walked down there.

Q: As you were walking from the protected beach towards Moore's Beach, did you see signs on poles like what is shown in Sunderland-22?

A: No.

Q: Okay. As you are walking from the protected beach to Moore's Beach, did you see any signs like what is shown in Sunderland-23 which says "High risk rip current area"?

A: No.

Q: As you are walking from the protected beach towards Moore's Beach, did you see any signs like Sunderland-24 that say, "Danger, Unprotected Beach"?

A: No.

Q: As you are walking from the protected beach to Moore's Beach, are you seeing any signs like whatever this thing is in Sunderland-25 in the middle of the photograph?

A: No.

See Sunderland Dep. 35:8-10.

Q: And how deep is the water on you just before you go into the water?

A: Calf

See Sunderland Dep. 35:8-10.

Q: As you were walking along, I think you said roughly calf-deep water?

A: Um-hum

Q: Is that a yes?

A: Yes, I would say top of my calf.

See Sunderland Dep. 130:4-131:15.

Q: Were you making any attempt to walk in an absolute straight path, or were you just ambling along and you fell?

A: We were just walking along the water.

Q: Because here's my question. Since you were not making an attempt to walk in an absolute straight line, is it possible that as you approach the location of the incident you were stepping a little bit to the right here a little bit to the left there?

A: Yeah, I mean we could have, but we were never deeper than the top of my calf.

See Sunderland Dep. 114:21-115:6.

Q: You are heading back. And were there times as you are walking back before you fell into the hole that all of you or some of you were walking in ankle-deep water as opposed to mid-calf water?

A: Yes.

See Sunderland Dep. 129:23-130:3.

Q: As you are walking in the fashion as well as you can describe it based on your memory, do you remember what happened, how you felt and what happened to you as you found yourself going in this water?

A: As I was walking, I took a step on my left leg and it just dropped.

Q: You mean your left leg went out and you went...

A: No, just like I was walking and then it's just like I just stepped right into, like, nothing. It was like it almost slide, like it slipped, and then with that I just went over. So it was like my leg just went out from underneath me.

See Sunderland Dep. 36:16-37:5.

...

Q. And what did you see when you had that observation [seeing Brad and Brandy]?

A: They were separated. And I'm going to approximate they were off the beach about a hundred, 120 feet.

Brandi was closer to inside the inlet, Brad was closer to

the ocean, and they were getting further apart. Brandi was staring directly at me, and Brad was on his back facing Brandi, so looking back towards the inlet. And he was just kind of almost—almost on his back like just going with the current. And it seemed like Brandi was stuck in this—she wasn't getting turned around in like a whirlpool. She was on this outer side of it, and then it seemed like Brad was caught in this other—almost like a river and he was getting pulled further away from her. See Sunderland Dep. 41:20-42:12.¹

10. Attached hereto and made a part hereof as Exhibit "A" is a true and accurate copy of the complete transcript of the deposition of Scott Sunderland.

11. On March 10, 2016, Brandy Smith at her deposition in a related companion case testified as follows:

Q: and were you and your dad at—walking in the water?

A: Yes. Like, we—it was only, like, to our ankles, at first, yeah. It was, like, we were still, like, right here, close to the sand, so you could, you had your feet on sand for a while you were walking.

Q: Um-hum. And there came a time when you and your dad somehow went into the water. Right?

A: Yeah.

Q: How did that happen?

A: I can't remember much, but like—how it happened, I—my eyes were closed, and I didn't know—like, I couldn't see anything much. And—and it just happened. And then we ended up somewhere in the ocean.

See Smith Dep. 21:5-19.

...

Q: All right. After you fell into the water, okay, do you remember seeing your dad at any time, after you fell into the water?

A: Yes.

Q: And do you—and where was he? How far was he from you?

A: He was pretty close. Just like a little bit far away from me, not that far.

Q: Okay. Was he saying anything to you?

¹ The correct spelling of Brad Smith's daughter's name is "Brandy". However, the spelling "Brandi" was inadvertently used in some deposition testimony, and has been referenced as such to maintain the word-for-word integrity of the deposition testimony.

A: Yes he was saying my name a lot. And then I don't remember much about—all I remember was him saying my name.

Q: Okay. And you remember the fellow on the Jet Ski picking you up?

A: Yes.

Q: All right. When the fellow on the Jet Ski picked you up, where was your daddy at that point in time?

A: I didn't see him anymore. I don't know—I didn't know where he was.

Q: All right. When you last saw daddy, what was he doing?

A: Laying on his back.

Q: Okay. Do you see how long this conference room is here?

A: Yes.

Q: Was he as far away from you as the length of this room, or more, or closer?

A: Closer.

Q: Okay. And what's the very last words you remember hearing daddy say?

A: Brandy.

See Smith Dep. 29:19-30:25.

12. Attached hereto and made a part hereof as Exhibit "B" is a true and accurate copy of the complete transcript of the deposition of Brandy Smith.

13. Brad Smith struggled to stay afloat and was sucked beneath the sea as a result of the vortex also known as the whirlpool.

14. Brad Smith's body was recovered on the beach during the early morning hours of July 30, 2012.

15. On February 16, 2016, Chief of the North Wildwood Beach Patrol since 1986, Joseph Anthony "Tony" Cavalier (hereinafter "Chief Cavalier") in the related companion case testified as follows:

Q: Okay. If I said to you, what is your understanding of what happened to Mr. Smith, do you have one?

A: How I think it happened?

Q: Yes.

A: Yes.

Q: Okay. And before you tell me how you think it happened, can you tell me the following: You didn't see it happen; did you?

A: No.

Q: All right. All right. So, you're basing your forthcoming answer as to how it happened based on what?

A: Being down there all the time.

Q: Okay. So, why don't you tell me how you think it happened.

A: At certain times of the day, when the tide is in or out, there's a drop off along that section of the beach,

Q: Okay. What do you mean by a drop off?

A: It literally drops off.

Q: Okay. And how long has that particular condition existed as far as you know?

A: The inlets changing all the time. Every year, it changes.

See Cavalier Dep. 41:20-42:19.

16. Attached hereto and made a part hereof as Exhibit "C" is a true and accurate copy of the deposition transcript of Chief Cavalier.

17. When questioned about his knowledge of the drop off, Chief Cavalier testified as follows:

Q: ... the drop off runs how---how far, or how long is it?

A: Twenty yards.

Q: Okay. And is that drop off, and I know you said this, but I'm kind of having difficulty understanding it. Is every season that drop off someplace along that Inlet Beach?

A: Yes.

Q: Okay. Does the drop off, season to season, move?

A: Yes.

Q: Okay. And all the years that you've been part of the North Wildwood Beach Patrol, is this drop off, does it, like, move from, let's say Point A, and then the next year, it's like a mile away, or is there a certain limitation that it stays within?

A: Limitation.

Q: And what would you say that is? Like, is it, like a quarter of a mile, a tenth of a mile that it moves?

A: Tenth of a mile.

See Cavalier Dep. 56:5-25.

Q: Okay. Were there any signs on July 27, 2012, that would have alerted Brad Smith as to this drop off?

A: No.

See Cavalier Dep. 58:8-11.

18. Chief Cavalier was asked whether or not there would have been any signs at the water's edge warning of the hazardous conditions. Chief Cavalier responding in the negative testified:

Q: Now, you do have an understanding that Mr. Smith and his family and the Sunderland family had been sitting on a protected beach on July 27, 2012, and had—and that Mr. Sunderland with his son, and Mr. Smith and his daughter decided to take a walk on the beach? Are you aware of that?

A: No.

Q: Okay. As they are walking from the protected beach, you would call it the last one, First and Surf. Right?

A: Yes.

Q: As they're walking, and they're going towards Moore's Beach, would there be any sign warning them of any hazardous condition located near the water's edge, as they're walking?

A: No.

See Cavalier Dep. 72:13-73:3.

19. Furthermore, when Chief Cavalier was asked about the visibility of the drop off he testified as follows:

Q: Okay. When you referred to the drop off earlier in your testimony, does this photograph show what you call a drop off?

A: No.

Q: Okay. How is a drop off different than the photograph that you have in your hand?

A: It's along the water's edge. It's in the water.

Q: So, that—wait. Okay. When you say it's in the water, so that if I'm standing on land, I can't see the drop off, correct?

A: Yes.

Q: Okay. That area that's shown in that photograph, is that Moore's Beach?

A: No.

Q: Is that Inlet Beach?

A: Yes.

See Cavalier Dep. 82: 23- 83:16.

20. Moreover, Chief Cavalier when asked if this drop off is consistently present, testified regarding the details of the drop off as follows:

Q: All right. Virtually, all the questions I'm going to be about that drop off. Because I want to try to understand where that drop off is, how it occurs. And you've indicated that it moves along with the shore line. Is that right?

A: Yes.

Q: So that's a dynamic process?

A: Yes.

Q: But that it is relatively constant, and they're not your words, so that it's a feature that, that while it moves, it doesn't really go away; does it?

A: No.

Q: It doesn't move from day to day; does it?

A: Yes. The Inlet changes every day.

Q: Okay.

A: The currents.

Q: Okay. Does the drop off change during the tide?

A: Yes. Certain tides, there is no drop off.

Q: Okay. What kind of tides is there no drop off, and what kind of tides is there a drop off?

A: High tide. High tide, it's a regular beach.

Q: Okay. And that's because the drop off—

A: Would be the further out.

Q: --is so far out that you couldn't walk to it?

A: Correct.

See Cavalier Dep. 111:6-112:15.

A: When the water is out is when there is a drop off. See Cavalier Dep 113:9-10.

Q: Okay. Do you know whether the currents are scouring that Point, that Lindsay calls a Point?

A: I believe it scours the whole Inlet Beach, the way the currents run, not just there.

See Cavalier Dep 118:15-21.

21. Chief Cavalier further testified:

Q: Okay. Well, when the drop off appears, how big an area is it?

A: Ten, fifteen yards.

Q: Okay. And how—how—what's the drop? In other words, if someone is walking, and they encounter the drop off, how far will they step down?

A: Over their head.

Q: Okay. All right. So, it's sort of a cliff?

A: I don't consider it that.

Q: Okay.

A: It's when the tide's out, it's just the water drops off.

Q: All right. It's a sudden drop off?

A: Yes.

See Cavalier Dep 119:1-17

22. When questioned as to whether or not the drop off was a factor in the Smith drowning, Chief Cavalier explained:

Q: Would I encounter the drop off—in this case, the Sunderland version is that Smith, Sunderland and the children were walking in ankle deep water, parallel to the beach.

A: Yes.

Q: Okay. And two of them just fell away, the beach fell away. And you indicate, you theorized they fell in the drop off?

A: Yes.

Q: Okay. What I'm trying to understand is, would the drop off have been running along the beach, and they got too close to it and slide from the side, or would they have encountered a drop off that ran perpendicular to the direction they were walking? Do you understand what I'm asking you?

A: Do you want me to explain how I think?

Q: Yeah, I do. Yeah. Very much.

A: They were walking along, and they came to the spot where it's—I call a drop off, and it was over their head, and they stepped into it.

See Cavalier Dep. 120:20-121:25.

23. Chief Cavalier clarified that the drop off is discussed by other lifeguards amongst themselves, and is recognized as a risk to beachgoers, even those who are simply walking at the water's edge:

Q:...and do you discuss where the drop off is with any of your personnel during the course of a summer?

A: No.

Q: Do they discuss it with you?

A: Yes.

Q: Okay. So, the drop off is a phenomenon that the guards will discuss—

A: Yes.

Q: --amongst themselves? And you recognize it as a risk?

A: Yes.

...

Q: You understand that the drop off is a risk to people who are using the beach?

A: Yes

Q: And you recognize that it's a risk that comes up to someone who is simply walking, not swimming?

A: Yes.

See Cavalier Dep. 122:7-123:4.

24. Chief Cavalier has recognized this risk for ten years, Chief Cavalier explained why he has recognized this risk for ten years at his deposition:

Q: Is that correct? And how long have you recognized that risk?

A: Ten years.

Q: What caused you to recognize that risk 10 years ago?

A: Some of the rescues we had down there (emphasis added).

Q: Okay. Can you tell me which—what rescues you had, and where they would be documented, that led you to recognize that risk?

A: No. I—it's my own personal experience of going down there, and looking at it.

See Cavalier Dep. 122:7- 123:16.

25. Chief Cavalier makes recommendations to the North Wildwood Mayor and Council regarding which beaches should be guarded every summer. Chief Cavalier described the process as follows:

Q: Okay. I have read a series of resolutions that were passed by the City of North Wildwood relative to what beaches would be protected for an upcoming summer season. And you're probably familiar with those resolutions; aren't you?

A: Yes.

Q: Right. And all the resolutions, there's a reference to the council and the mayor having considered the recommendations of the North Wildwood Beach Patrol?

A: Yes.

Q: All right. Were those recommendations given to the mayor and the counsel of North Wildwood on an annual basis, like every year?

A: Yes.

Q: And were they typically given a couple months before the beginning of the summer season?

A: A month.

Q: Okay. And were your recommendations that are referenced in the resolutions in writing from you to the mayor and council?

A: Yes.

See Cavalier Dep. 27:25-28:1-21.

26. Chief Cavalier noted that the drop off is present every year, he explained that there are two drop offs and compared the two as follows:

Q: The drop off is, is present every year; isn't it, someplace or other?

A: Yes.

See Cavalier Dep. 131:25 – 132:1.

Q: Okay. Okay. The drop off that we've been talking about is typically how deep?

A: Ten.

Q: Okay. And are there other areas along bay of these beaches where there are other drop offs?

A: Yes.

Q: Okay. Are those drop off, can they be as deep as 10 feet, also?

A: 50 feet. 50 to 60 feet.

Q: Okay.

A: That's the drop off at Moore's Beach, where they fish.

See Cavalier Dep. 133:20- 134:6.

27. Chief Cavalier acknowledged that the drop off was present at the location of the Smith drowning on July 27, 2012, when he testified as follows:

Q: Okay. So if I follow you correctly, the drop off, when the drowning occurred, was at the Point, and it was about 10 or 15 feet deep?

A: Yes.

See Cavalier Dep. 135:20-23.

28. Chief Cavalier was also personally aware of the vortex or whirlpool and explained his knowledge as follows:

Q: Okay. He [Dr. Stewart Farrell] also says that when the back bay is going into the ocean, that there is a vortex or whirlpool in the body water called the Inlet?

A: Yes.

Q: All right. Given the number of years that you have been on the beach patrol, is that vortex or whirlpool created every time the back bay moves out to the ocean?

A: Yes.

Q: All right. I know you're not a research scientist, but what is your understanding of what causes the whirlpool or vortex?

A: I believe it's the bay hitting the ocean at that point.

See Cavalier Dep.43:15-44:5.

Q: All right. How large is this whirlpool or vortex that you have seen in the past in the Inlet?

A: Twenty-five yards.

Q: Okay. And does it appear to be circular.

A: Yes.

Q: Okay. So, the diameter across would be about 25 yards?

A: Yes. I'm sorry(emphasis added).

See Cavalier Dep.45:4-18.

29. Chief Cavalier was of the opinion that an average swimmer could not swim through the vortex or whirlpool, he stated:

Q: That's okay... Could an average swimmer swim through the vortex?

A: No.

See Cavalier Dep. 45:4-46:25.

Q: Okay. So, at Moore's Beach, before July 27, 2012, was that area consistently 50, 60 feet deep?

A: Yes.

Q: All right. For what length?

A: Twenty yard, twenty-five yards.

See Cavalier Dep. 53:12-16.

Q: Okay. And Dr. Farrell, in one of his statements, and hopefully we can get to it today, he says that sometimes when the back bay is going to the ocean, that the water is moving at five miles per hour, the water that's going out to the ocean.

Q: Would you agree with him?

A: Yes.

Q: Would you agree that it could be more than five miles per hour?

A: Yes.

Q: Ten miles per hour?

A: No, not—not that—

Q: Somewhere between five and ten miles per hour?

A: Yeah.

See Cavalier Dep. 60:16- 61:6.

30. Chief Cavalier acknowledged that the vortex or whirlpool is present in the same location as the drop off:

Q: The vortex that you talked about before, how far is the vortex from the drop off?

A: That's—that's where it is.

Q: Oh, okay. All right. So, the vortex is, is related to—

A: Yes.

Q:-- the drop off? Okay.

See Cavalier Dep. 131:2-13.

31. North Wildwood promotes and encourages the use of Moore's Beach since it built stairs which provide access to the Unprotected Inlet Beach. There are condominiums

present directly over the sea wall at Moore's Beach. The residents of those condominiums have direct access to the Unprotected Inlet Beach. Chief Cavalier testified as follows:

Q: Okay. The individuals that own the condominiums, the actual condominium units, I meant to say, in that condominium building, is there any prohibition from those individuals sunbathing at Moore's Beach?

A: No.

Q: Okay. In fact, there is—there are stairs that people can access from the parking lot to get to Moore's Beach. Correct?

A: Yes.

Q: ... The closest stairs that exist in order for someone to get to Moore's Beach would be the stairs that are located from the parking lot that we see in this particular exhibit. Correct?

A: No.

Q: Where else?

A: Down by the corner at Moore's Beach.

Q: Let me see.

A: All the way down. There's a set of steps that goes right on the beach.

See Cavalier Dep. 51:19 – 52:15.

32. North Wildwood provides and maintains a parking lot in the Hereford Inlet Section, which Chief Cavalier credits for making First and Surf Avenues, a more crowded beach, as noted in the following deposition testimony:

Q:... "Two rescues, guards, Goss and Muso did a good job on controlling the crowd at First and Surf. There are heavy crowds at First Street due to the parking lot." Can you explain what that means that there are heavy crowds due to the parking lot? What's the connection?

A: Well, there's a--- the city made a parking lot, and people come down to the beach and park there, so they go out on First and Surf.

Q: Got it. And from that parking lot that we've been referring to that's next to the condominiums, individuals that park their cars there, can take one set of steps to get right on Moore's Beach?

A: Yes.

33. Chief Cavalier testified that on July 27, 2012, there were no signs on the Unprotected Inlet Beach prohibiting walking in ankle deep water, or walking in water that goes to your mid-calf. See Cavalier Dep. 62:1-8.

34. There are “No Swimming” signs on the Unprotected Inlet Beach. However, these signs were not regularly enforced by the beach patrol, due to the large area of the Unprotected Inlet Beach. Chief Cavalier testified to this fact as follows:

Q: All right. I handed to you exhibit 19, and then I took it back. And you identified the area where this, what is shown this particular photograph, and you would agree that the sign on the top means no swimming?

A: Yes.

Q: All right. And is it fair to say that when you see that sign, it also means it’s not a protected beach?

A: Yes.

Q: Okay. And below, there’s another sign that says, “No dogs, cats, or any other domestic animals on beach May 1 to October 1,” and it references Ordinance No. 1416. Was it the responsibility, before Mr. Smith’s drowning, of the North Wildwood Beach Patrol to enforce the no swimming sign and the no animal sign?

....

A:...you mean, if people are in the water, did we enforce that [no swimming] sign?

Q:Yes.

A: No.

Q: Why not?

A: It’s too big an area to cover (emphasis added).

See Cavalier Dep. 70: 3- 71:10.

35. Though the lifeguards would not regularly enforce the “No Swimming” Signs they did listen to the radio and effectuate rescues on the Unprotected Inlet Beach every summer, as evidenced by Chief Cavalier’s testimony:

Q: All right. The—let’s see if we can do it this way: were there any occasions where North Wildwood lifeguards had to effectuate a rescue of a person that was in the water off of Moore’s Beach?

A:Yes.

Q:.. were there occasions before July 27, 2012, where lifeguards of the North Wildwood Beach Patrol had to effectuate a rescue of someone that was swimming off of what we've been calling the Inlet Beach?

A: Yes.

Q: Okay. From your experience, is it safe to say that in all the years that you have been a member of the North Wildwood Beach Patrol, that before July 27, 2012, there were occasions during the summer season when North Wildwood lifeguards had to effectuate rescues of individuals swimming both off the Moore's Beach and off of the Inlet Beach?

A: Yes.

Q: Okay. Typically, how would your lifeguards be alerted to the fact that they had to effectuate a rescue off of Moore's head—Moore's Beach and the Inlet Beach?

A: Police department, we would monitor the police radio. The police would get a call, somebody's in distress, Moore's or the Inlet, and we would respond.

See Cavalier Dep. 91:10- 92:17.

36. Additionally, Chief Cavalier acknowledged that about a dozen times a summer, the lifeguards must save someone who has tried to swim to Champagne Island, a sand bar, located off of the Unprotected Inlet Beach, Chief Cavalier explained:

Q: Is there any prohibition from a person who's on the Inlet Beach, not Moore's Beach, the Inlet Beach from swimming to Champagne Island? A prohibition.

A: No.

Q: Okay. Is there any prohibition for someone swimming to Champagne Island from Moore's Beach?

A: No.

Q: Okay. How many rescues in a given summer before July 27, 2012, did your lifeguards have to effectuate relative to people who were trying to swim from Moore's Beach and/or the Inlet Beach to Champagne Island and vice-versa?

A: About a dozen a summer.

See Cavalier Dep. 101:5-21.

37. The Beach Patrol Daily Report Dated August 19, 2012, about three weeks after Brad Smith's drowning, states that there were, "Eight Preventions at the Point," Chief Cavalier explained a prevention as follows:

Q: Okay. Now, let me show you what's been marked for identification as Exhibit 44. It's a daily report dated August 19, 2012. And at the bottom, the same category, again, it says, "Eight preventions at the Point." Okay. Now, when it says eight prevents, do that—if you can tell, does that mean preventing eight people from going into the water? What—I don't understand this term prevention.

A: They were trying to stop people from going in the water there.

See Cavalier Dep. 103:6-19.

38. City officials, including Chief Cavalier, have acknowledged in sworn testimony that beach goers who frequent the Unprotected Inlet Beach are inclined to engage in behaviors otherwise prohibited by various North Wildwood Ordinances.

39. Such activities include, but are not limited to, drinking alcoholic beverages on the beach, utilizing floatation devices in the water, playing games, and bringing their dogs to the beach.

40. When asked about any discussions between Chief Cavalier, the Mayor, and City Council regarding whether or not to close the Unprotected Inlet Beach, Chief Cavalier testified as follows:

Q: Was there any discussion while you were the chief of the beach patrol of North Wildwood, before July 27, 2012, at a mayor and council meeting of the City of North Wildwood, about having a lifeguard or lifeguards with lifeguard stands in what we've been calling the Inlet Beach area?

A: No.

Q: Okay. Same question for Moore's Beach... Before July 27, 2012, did you ever attend a meeting of the mayor and council where there was a discussion about

having a lifeguard and a lifeguard, perhaps with a stand, at what we've been calling Moore's Beach?

A: Yes.

Q: Okay. Given the number of years you've been the chief of the beach patrol, can you give me your best estimate as to how many times you spoke to the mayor and council at one of their meetings?

A: About Moore's Beach?

Q: Yea.

A: Once.

Q: Okay. And when was that?

A: Twelve years ago.

Q: Okay. And can you tell me what you said?

A: We had Mayor Palumbo, who was the mayor, a discussion was brought up about should we guard the Moore's Beach again. And the mayor and I went to the beach, and he actually went around asking people how they felt about a lifeguard being back there. And 90 percent of the people didn't want a lifeguard there.

Q: Did they tell you why they didn't want a lifeguard there?

A: They want to be able to do what they want to do.

Q: And one of the things they wanted to do was drink alcoholic beverages?

A: Yes.

Q: All right. What else besides drinking and alcoholic beverages did they want to do?

A: Dogs, Jet Skis (emphasis added).

Q: Okay. And since that time, have you, as the chief of the beach patrol, let the people do what they wanted to do when you were there with the then mayor?

A: If we got complaints from the public, the police department would respond, if people were out of control with—the alcohol, or the dogs.

Q: Okay.

A: And we finally got it under control.

Q: Okay. When did you finally get it under control?

A: Well, with the dogs, we eliminated that. But the alcohol, you never eliminate.

Q: Since July 27, 2012, I have been to Moore's Beach and the area that you call the Inlet Beach several times, and I have witnessed police officers of the City of North Wildwood walking on the beach. Have you made that same observation?

A: Yes.

Q: All right. Did you ever talk to the chief of the North Wildwood Police Department about having North Wildwood police officers patrol Moore's Beach and the Inlet Beach?

A: Yes.

Q: All right. And going back as many years as you feel comfortable telling me, how long have you been discussions with the chief of police of the City of North Wildwood about patrolling Moore's Beach and the Inlet Beach?

A: The last 10 years.

See Cavalier Dep. 31:5- 34:3.

41. One year to the day prior to Brad's drowning, on July 27, 2011, Shorenewstoday.com posted an article entitled "Guard Chief Warns About Swimming in Inlet." This article was posted a result of the drowning fatalities of a Baltimore woman off of the unprotected inlet beach. Chief Cavalier is quoted as saying:

The Inlet can look like it has calm water, but it is deceiving. **The water starts off shallow but then about two feet out from shore it can drop off (emphasis added).** You can go from knee deep to right over your head real quick. There's a certain point off the shore, you can see it from the sea wall, the water looks like a washing machine out there. See Exhibit "D".

42. Attached hereto and made a part hereof as Exhibit "D" is a true and accurate copy of the above referenced article.

43. Lieutenant David Lindsay, a retired 32 year veteran of the North Wildwood Beach Patrol, was deposed in connection with this matter's companion case on March 2, 2016. In that deposition, Lieutenant Lindsay testified as follows:

Q: In the North Wildwood Beach Patrol, could you draw with a red marker where the inlet zone was?

A: Sure.

Q: All right. Now, you know the city better than I do... can you give me street names?

A: Yes, Sir.

Q: Okay. Go ahead.

A: Inlet zone went from Surf Avenue down to the ocean, along the waterfront to the rock pile at Second and JFK, and then back along the bulkhead or walkway up to, I believe it's First and JFK.

Q: First?

A: First and Surf.

See Lindsay Dep. 13:9-23.

Q: For how many years before July 27, 2012, were you assigned for the summer to, we'll call it, the inlet zone?

A: I believe in '98, I was moved to the Inlet.

Q:...I'm surmising that because of your experience and your professionalism, you were assigned to the inlet zone, as opposed to other zones. Would that be a fair statement?

A: Well, I was assigned to the inlet zone in '90—the dates aren't exactly clear, but around '96, I was put in charge of the Jet Ski.

Q: Right.

A: And then the Jet Ski was more or less put in charge—it was assigned to the Inlet. So, I went with the Jet Ski.

...

Q:... am I correct in saying that the area where, is, say Moore's Beach and the Inlet Beach is some of the more dangerous beach area in North Wildwood, because of these currents that we've been talking about?

A: That's true.

See Lindsay Dep. 20:8-21:13.

44. Attached hereto and made a part hereof as Exhibit "E" is a true and accurate copy of the deposition transcript of Lieutenant Lindsay.

45. Since Lieutenant Lindsay was in charge of the Inlet section of the beach he was asked at depositions how he knew whether or not someone was in need of assistance on the Unprotected Inlet Beach. Lieutenant Lindsay testified in the following manner:

Q: According to these records, which we'll get in a moment, it appears to us that there were occasions where lifeguards, and not just saying you necessarily just yet,

...

Q: Where lifeguards that were posted in the inlet zone had to effectuate rescues up north, the Moore's Beach, and at the Point area. Is that correct?

A: Yes, sir.

Q: All right. And how would you, if you were posted in the inlet zone, know that somebody was in trouble at the beaches, which is Moore's Beach, the Point area? How would you know that?

A: Well, I actually was, you know, a lot of guys made jokes, because I would always listen to scan. But because of the section of the beach I was in charge of, I would have my radio on scan all the time, so I I'm listening directly to dispatch.

See Lindsay Dep. 26:4-22.

46. Lieutenant Lindsay described the Hereford Inlet Conditions as follows:

Q: Okay. If you had to give me an estimate of the number of times when you were assigned to the inlet zone before July 27, 2012, that you had to assist in rescues of people who were trying to swim from Moore's Beach to Champagne Island, or back, give me your best estimate. How many times a summer?

A: Twice a week.

Q: Okay. And I have a buddy who was raised down here in Cape May County. And he told—he's a tremendous swimmer, but he was explaining to me how difficult that swim is, because of the currents. Correct?

A: Yea. It's treacherous.

See Lindsay Dep. 29:8-20.

47. On July 1, 2013, Lieutenant Lindsay was recorded by a Mrs. Simpson on the North Wildwood Beach. This conversation was transcribed. See Exhibit "F". Lieutenant Lindsay was questioned about the conversation at his deposition.

48. Attached hereto and made a part hereof as Exhibit "F" is a true and accurate copy of the above referenced transcription.

49. Lieutenant Lindsay, who is of the opinion that the Unprotected Inlet Beach needs to be shut down to prevent future drownings, clarified at his deposition that he believes the reason the beach has not been shut down is because the local establishments and people would be against the beach closure. Lieutenant Lindsay described his reasoning as follows:

Q: ... What was the pressure that whomever that was associated with the bars was putting on to keep Moore's Beach open, as opposed to closing it?

A: Well, to be honest with you, I—I don't know any pressure. When I was in that conversation [the recorded conversation with Mrs. Simpson] I was really just talking about my own personal opinion. And what I did a lot with—and you, know, I still to that day feel the same way, it has nothing to do with how the city or the bartenders—the bar owners, but it's just my personal opinion would be that if you were to—if you were to shut that section of the beach down, which is really the—the only way you're going to prevent another drowning, and everything I say there, you know, I'll stand by. I would have told Mrs. Simpson---

Q: Right.

A:-- the same thing if she told me she was with you guys.

Q: Right.

A: So, it's not a matter of any of the bar owners, or anyone. It's just my personal opinion that if you were to shut down this section of the beach—

Q: Right.

A:--which, and you said you were there in the—you know, the peak of the summer, I don't know the bar owners that are right over the bulkhead would be too happy. And I know for a fact that the—the local people, who go to that beach, just to get away from the lifeguards, you—you know, you wouldn't have a happy bunch of people.

See Lindsay Dep. 32:11-33:18

50. Lieutenant Lindsay made a statement to Mrs. Simpson regarding the number of drowning fatalities on the Unprotect Inlet Beach. When questioned about this statement at deposition, Lieutenant Lindsay testified:

Q:... Now, let me ask you this: you told Mrs. Simpson on the bottom of page 3, "You know, there's seven drownings in nine years."

A: um-hum.

Q: When you say drownings, are they fatalities?

A: Well, to be honest with you, there were four in nine years. What I would do is, I would sit here in my truck, and I would see people down there.

Q: At the Point, you mean?

A: At the Point.

Q: Yeah.

A: And what I would do is, I would go down there, and try to express to the people, you know, how dangerous it is down there. So, when I said that, it was just trying to get people—

See Lindsay Dep. 34:20-35:9.

51. Lieutenant Lindsay was asked at his deposition why the Unprotected Inlet Beach remains unprotected despite the number of drowning fatalities and rescues on the Unprotected Inlet Beach. He responded in the following manner:

Q:... You've been very candid and truthful today, and I respect that. And I'm almost finished. I just want to ask you a question. I've been through all of these reports, okay, yours and others. **With all the rescues that are documented, I keep asking myself, why wasn't there a lifeguard stand with lifeguards close to Moore's Beach, as opposed to being at, First and Surf?**

A: **First and Surf, yeah. Well, the answer I would give to that question is, when you put a lifeguard stand on the beach, you're telling the public that's a safe place to swim. And that area of the beach is anything but safe (emphasis added).** Forget about the currents. It's a boating channel. I explained to my—Will the other day, we joked about, we thought we were going to see Rodney Dangerfield come in on Caddyshack with the horn going, Jet Skis, you know, kite surfers, speed boats. You name it. I mean, you've been down there.

Q: Yeah.

A: On a—on July 4th, it's—we would drive down there, and we'd be like, let's get out of here. It's—as a lifeguard, it was—we didn't want to be anywhere near it.

See Lindsay Dep. 43:20-44:18.

52. **Lieutenant Lindsay expressed extreme concern regarding the lack of warning to beachgoers such as Brad Smith. He truly believes that the only way to prevent another drowning at the Unprotected Inlet Beach is to close the beach completely.** Lieutenant Lindsay testified in the following manner:

Q: Well, what warnings are there to people like Brad Smith, who's walking with his daughter down the beach, to say that there could come a time where you're going to walk into 10 foot deep water when you're only walking in ankle deep to mid calf water? There's no warning?

A: No. The signs we put up, dangerous currents. But—

Q: But you wouldn't see them if you're walking from a protected beach to where the event took place?

A: No. Nope (emphasis added).

Q: All right. Here's another thing I asked myself. And it's easy for me to ask questions, and it's tough for people to provide answers. I realize that. What do you think, given all your experience on the beach patrol, and especially with this area that we've been talking about, how do we prevent another Brad Smith from drowning?

...

A: Yeah. You know, being a lieutenant down there for so long, and being on a lot of these drownings, you know, I asked myself the same thing. And I think the only way to prevent it is to shut the beach down completely (emphasis added). I mean, fences, you know, guard dogs, 24/7. Not even—not even walking down there. Because there's—you know—

Q: In a perfect world, if—if you were king, where would you shut the beach off,; from what point to what point?

...

Q: What you're saying is you'd have to close the beaches from Moore's Beach to the inlet zone, where it starts?

A: Yes.

Q: Okay.

A: And no one step a foot on—on the sand.

See Lindsay Dep. 45:10- 47:13.

Q:... What would you tell them when you went down there, when they're at the Point, as to why they shouldn't be swimming there?

A: We would tell them that they're in unprotected part of the beach, unguarded part, and that it's not a safe place to swim.

Q: Okay. If somebody was walking at water's edge, would you tell them not to walk there?

A: I couldn't we just didn't have the—because it was—it's pretty—you know being down there yourself, it's a

pretty popular area to walk. A lot of people—a lot of people that are the Moore's Beach will walk this way to get a hot dog, a lot of people that are at the inlet beach will walk that way to see the boats, and Jet Skis, and—so, it—you know, it just wasn't—it wasn't—

Q: Yeah. The Chief touched on that. Not enough manpower, or woman power.

A: Right.

Q: To be politically correct. The—when people would walk from Moore's Beach south, where would they go to get a hot dog?

A: There was a stand—there's a stand at First and Surf, and also one at Second and JFK.

Q: Okay. In a perfect world, if North Wildwood had an unlimited budget, would you, if you were the chief, have lifeguards walking on foot between Moore's Beach and the beginning of the inlet zone to warn people about that even walking in ankle deep water could be dangerous.

A: Not lifeguards. Police.

Q: Who would you—If you would have to have police department. Because you'd have too much of a confrontation with—with the beach patrol.

...

A: Yeah. I mean, you'd have to really, it would be like a military state. You'd have to—you would get a—have such a problem with locals. That's their beach. They—you know, they think, you know.

Q: Um-hum. You know, I'm going to leave this up to you if you want to answer it or not. Mrs. Smith, her sole motive by this litigation is never to let this happen to another family, to lose, you know, a husband, two young—you know, a father to, you know—to two young kids. You don't have to answer if you don't want to.

A: Um hum.

Q: And nobody's blaming you please, think about this whole thing.

A: Oh, I know.

Q: What would you say to her about the future for—to prevent this from happening again?

A: Yeah. You know, it definitely wasn't an easy thing for me. I would tell her I don't know what the answer is. And I sat—I sit on the beach eight hours a day, six days a week. And knowing how dangerous it is down there, trying to do my best. And you know, I know, our response team couldn't have done a better job. There was a Jet Ski on scene.

Q: Yeah.

A: That was right there.

Q: Right, yeah, we know.

...

A: What it is, is you put big fences, electrical fences with guard dogs, and police, and you don't let people in there.

That's—that's what it comes down to.

See Lindsay Dep. 51:8-54:8

53. An extensive amount of depositions were taken in the Law Division companion case, and almost every city official was asked about their personal knowledge of the dangers which are present on the Unprotected Inlet Beach.

54. Former City Administrator Louis Belasco responded in the following manner:

Q: ... Being a resident of North Wildwood, and you're maturing through grammar school and high school and college, were there any dangers to the inlet beach area, and including the inlet that runs adjacent to it, that you became aware of, as someone living there?

...

A: Well, all inlets are inherently dangerous, mostly due to the currents that run through them.

See Belasco Dep. 15:5-15.

55. Attached hereto and made a part hereof as Exhibit "G" is a true and accurate copy of the deposition transcript of Louis Belasco.

56. Carl Delinski, Jr., the Supervisor of Public works in North Wildwood testified in the following manner:

Q: Okay. Now, given your employment with the city over the years, have there been times that the Inlet Beach and Moore's Inlet Beach changes in size?

A: Constantly.

Q: Okay. And why is that?

A: I would guess because of the inlet, itself.

Q: Yeah.

A: The tides that run through the inlet. It's constantly changing. The whole beach, actually, not just there. Even our beach front, the big beach. But that's—from day to day, it could be different when you go down there.

Q: All right. We've taken a lot of depositions, we also took the deposition of Chief Cavalier of the beach patrol, so all of us lawyers know—we've learned a lot about the inlet, Hereford Inlet, and the beaches there. Just given your experience with that inlet, itself, is there something unique about the inlet waters there?

A: The tides are terrible there. I mean it—that's where the water fills the back bay, and empties. So, it rips through there like really bad. I mean (emphasis added).

See Delinksi Dep. 15:3- 16:3.

Q: All right. We took the deposition of Chief Cavalier, who was talking about when the back bays are going into the ocean, that you can literally see—

A: Oh, yeah,

Q: --a vortex?

A: Yes,

Q: All right? He described it for us in pretty good detail. Have you ever seen this vortex?

A: Sure.

Q: Okay. And does it typically occur when the back bays are going into the ocean?

A: I would think, yeah, on the outgoing tides.

Q: Yeah. Outgoing from the bay to the ocean?

A: From the bay into the ocean, yeah.

Q: And is it there every day when the back bays are going into the ocean?

A: I would think in spots, yes.

Q: And what does it look like?

A: Whirlpool. Just a big vortex, like you said. You could actually see the water spinning (emphasis added).

See Delinksi Dep. 16:18 – 17:15.

57. Attached hereto and made a part hereof as Exhibit "H" is a true and accurate copy of the deposition transcript of Carl Delinski, Jr.

58. Chief of the North Wildwood Police Department, Matthew Gallagher, testified in the following manner:

Q: Okay., are you aware of any dangers of what—of the beach that you circled in blue, which was Moore's Beach, on Exhibit 58, of the beach collapsing?

A: I was called down to Moore's beach, I don't know remember the year, where they actually did close off the beach for a little while, because there was—sand was collapsing into the ocean.

Q: Okay. And what year or years was that?

A: I don't recall.

Q: Best estimate?

A: within the last five years.

See Gallagher Dep. 22:21- 23:8.

59. Attached hereto and made a part hereof as Exhibit "I" is a true and accurate copy of the deposition transcript of Matthew Gallagher.

60. Mayor of North Wildwood, Patrick Rosenello was deposed in connection with the companion case on March 10, 2016. He testified as follows:

Q: .. And my question is, before July 2012, did you ever see people wading in the water off of Moore's Beach?

A: Yes.

Q: Okay. Now, were those individuals that you saw in violation of any city ordinances?

A: I don't know.

Q: Okay. When you saw those people wading off the Moore's Beach, before July 2012, did you call the North Wildwood Police Department, or the North Wildwood Beach Patrol?

A: No.

Q: Okay. When you saw those people wading in the water off of Moore's Beach before July 2012, did you think that they were exposing themselves to any hazardous conditions existing in the water that constitutes Hereford Inlet?

A: I believe that if you're not swimming in front of a lifeguard, you are subjecting yourself to a hazardous condition in the ocean.

See Rosenello Dep. 42:14-43:11.

Q:.. have you ever seen any signs on the area that you delineated as the inlet beach, warning anyone about the dangers of walking on—in ankle deep water?

A: No specifically referencing ankle deep water, no.

See Rosenello Dep. 50:23- 51:3.

Q: Okay. Okay. The second sentence I've highlighted says, "There's no gray area. If there's not a lifeguard on duty, you should not be in the ocean," he said. 'It's such a dynamic environment, to say you were only so deep, that's not the issue. There's no room for equivocation.'" Do you stand by that?

A: Yes.

Q: All right. As it relates to the activity of Mr. Smith and his daughter, and Scott Sunderland and his daughter, in walking in ankle deep water, would you say—would you agree with me that this quote that I just referenced does not apply to that activity?

A: I would say that the ocean is a wilderness, and if I were not familiar with the area I'm in, and there was no lifeguards there, I would not advise someone to be—to go into that water.

Q: Even in ankle deep water?

A: Even in ankle deep water.

See Rosenello Dep. 82:6-25.

Q: All right. The next quote, "If you choose to enter the water on an unguarded beach, you do so at great risk to yourself; he said, 'no swimming, swimming, if there's no lifeguards, you should not be wet. It's very simple. So, is it your position, again, in light of their particular statement, that Mr. Smith and his daughter were exposing themselves to hazardous conditions by walking in ankle deep water at a beach that there was no lifeguard?"

A: Again, I think it's incredibly unfortunate what happened to Mr. Smith. I think that people have the mistaken impression that the ocean is similar to their neighborhood pool, and they're not familiar with the currents and tides and things of that nature. And I think, in this context, now, at this time, I'm the mayor of North Wildwood, I'm the Director of Public Safety, I think it's very important for me to very, very clearly take the public position that if there is not a lifeguard, you should not be wet. And I stand by that answer.

See Rosenello Dep. 83:24-84:21.

A: It is my position they were exposing themselves to hazardous conditions? I think—I think the best answer I can give you is that, being interviewed for this newspaper article, as the spokesperson for the City of North Wildwood, an article that's coming out in the middle of the summer, I believe it was my obligation to

make a statement that, do not go in the water at an unguarded beach. That's what—that's the message O was trying to send with that quote. So that—there—and again, I stand by that, that I don't think that there is room for, well, I was ankle deep, I was knee deep, I was thigh deep. You should not enter the ocean unless there is a lifeguard on duty on that beach.

See Rosenello Dep. 85:3-17.

61. Attached hereto and made a part hereof as Exhibit "J" is a true and accurate copy of the deposition transcript of Patrick Rosenello.

62. Mayor Rosenello also described the Hereford Inlet as constantly changing:

Q: All right. This is kind of a follow-up question to something I asked you about 15 minutes ago: Looking at that body of water called the inlet, and given the fact that you started living in North Wildwood at age four. Right? Up until July 27, 2012, the drowning of Mr. Smith, what have you, personally, observed about the inlet, itself, the body of water, relative to the- I'll be a little bit more specific—relative to how the actual channel moves?

A: Right. It changes on an almost daily basis. There are what I call shoals or sand bars that come and go. This large piece of sand you see up here and coming off the bottom of Stone Harbor didn't exist five years ago, and it might not exist tomorrow. The inlet beach that we're talking of didn't exist until probably the late '80s, maybe, mid to late '80s. There was no sand accumulated there. So, it—it—the whole—the whole area changes on a—I say on a daily basis. I still live in an area where I can see the inlet. And literally on a daily basis.

See Rosenello Dep. 29:12-30:7.

63. Mayor Rosenello when asked why he believes that the Unprotected Inlet Beach should remain unprotected, he testified:

A: That area is a large expanse, and it would probably require upwards of 10 additional lifeguard stands, which during the summer would be at least 20 additional lifeguards, plus supervision, which would be a very large increase to the size of our beach patrol. So, it would be from—from a resource standpoint, and a recruitment standpoint of getting qualified guards, that

would be a very large increase in our—in our—in our enforce—in our beach patrol.

Q: Okay. Before July 27, 2012, is it your position, based upon your experience as a governmental official, that North Wildwood simply didn't have the money to put those additional lifeguards posted in the area that you have defined as the inlet beach, which includes Moore's Beach?

A: No. I think the city, if we chose to allocate resources there, we could have—we could certainly afford to put lifeguard stands there (emphasis added). But another—another reason, and I only think of it, because I looked at this, we also want to provide people areas where they can fish, and engage in other things to do not involve lifeguarding. And you can't have guarded—you can't allow people to fish at guarded areas. That's a very popular fishing area, as well. And so, that would be another reason why I would not support that. Because again, we try to accommodate swimmers, surfers, fishermen, a lot of different activities that happen on the beach.

Q: Well—

A: Or the ocean.

See Rosenello Dep. 74:5- 75:12.

64. Mayor Rosenello is of the opinion that the Unprotected Inlet Beach should not be closed to the public. He described his reasoning in the following manner:

A: Exhibit 72 is probably the best depiction. I mean, people fish, they sit, they relax on the beach, they play games on the beach. You know, and I—I think keeping the beaches open to the public is important for---

Q: Okay. If that's being the—if that's the case, just in light of what you testified, why wasn't there a lifeguard on Moore's Beach before July 27, 2012.

A: There's still not a—I'm sorry.

A: We have a—North Wildwood's an island, literally, and we have many areas of tidal areas that aren't guarded by lifeguards. As a matter of fact, if you further west, there's areas where small beaches develop along the sea wall frequently. And we don't guard them all. We have a certain number of designated guarded lifeguard beaches that we guard, and we—it would simply be impossible to place a lifeguard at every place where the public has access to the ocean or bay.

See Rosenello Dep. 69:7-70:4.

65. Surf fishing is permitted on the Unprotected Inlet Beach. In his March 10, 2016, deposition, Mayor of North Wildwood, Mayor Rosenello clarified the North Wildwood Surf Fishing rules as follows:

Q: So, people are permitted to fish in that area?

A: Yes

Q: All right.

A: They're—I'm sorry. People are pretty much permitted to fish anywhere in the city where it's an unguarded beach, including—we have a couple spots down around Second and Kennedy, where we don't guard because of a groin there, and again, people are allowed to fish in that area.

See Rosenello Dep. 75:18-76:2

66. Surf fishing is also promoted by the City of North Wildwood. Stephen DeHorsey, Jr., Assistant Superintendent of Recreation and Director of Tourism for the City of North Wildwood testified that every year there the city holds a surf fishing contest, and one of the permitted beaches for this tournament is the Unprotected Inlet Beach, Mr. DeHorsey testified as follows:

Q: Okay. Could you give me kind of an overview of what the city's involvement was with the surf fishing before July of 2012?

A: The recreation department runs a surf fishing tournament, and then there's actually two surf fishing tournaments that are held in North Wildwood through two other organizations.

Q: Okay. So, let's do the surf fishing tournament that is conducted by the city.

A: The recreation department runs a surf fishing tournament, and then there's actually two surf fishing tournaments that are held in North Wildwood through two other organizations.

Q: Okay. So, let's do the surf fishing tournament that is conducted by the city,

A: By the rec. Okay?

Q: By the recreation?

A: Department, yes.

Q:Of the City of North Wildwood?

A: Yes.

Q:All right. And at what beaches does this surf fishing tournament take place?

A: Our boundaries are 26th Street and the beach, all the way down to—

Q: Moore's Inlet Beach?

A: Past that. There's apartments on the seawall. And there's a fence that goes up, all the way—you can fish all the way up until there.

Q: Okay. And when is the surf fishing tournament typically conducted?

A: The weekend after Labor Day.

Q: Okay. And exactly what does the city do to get this tournament going?

A: We put it in our information, our calendar of events, put posters up, and one or two signs.

See. DeHorsey Dep. 20: 3 – 21:10.

67. Attached hereto and made a part hereof as Exhibit "K" is a true and accurate copy of the deposition transcript of Stephen DeHorsey, Jr.

68. There are a number of publications which discuss the powerful and dangerous conditions of the Hereford Inlet.

69. The former Mayor of North Wildwood, William Henfey, is quoted in the September 26, 2012, issue of the Cape May County Herald as saying: "there's a vortex that's created in our inlet, we have competing inlets coming out of Hereford Inlet and it's causing a whirlpool effect there." See Exhibit "L".

70. Attached hereto and made a part hereof as Exhibit "L" is a true and accurate copy of the above referenced article.

71. There Hereford Inlet Lighthouse information packet states: "...strong currents and shifting sandbars near the entrance to the inlet caused frequent groundings and shipwrecks. Because of this, in 1849, a Life Saving Station was constructed along the sought bank of the Hereford Inlet." See Exhibit "M".

72. Attached hereto and made a part hereof as Exhibit “M” is a true and accurate representation of the above referenced pamphlet.

73. In a December 17, 2013, report the U.S. Army Corps of Engineers stated that, “Tidal currents may cause tangible effects on shore stability and water quality. These are tidal driven water level differences between the ocean and back bay areas. The periodic rise and fall of the ocean water elevation adjacent to barrier islands, creates the ebb and flood cycle of tidal currents. See Exhibit “N” p. 59.

74. Attached hereto and made a part hereof as Exhibit “N” is a true and accurate copy of the above referenced report.

75. Traditionally, the last protected beach in North Wildwood is Surf Avenue. First and Surf Avenue faces the Hereford Inlet. See Rosenello Dep. 49:18-19.

76. Michael C. Maslowski a retired New Jersey State Trooper, and member of the Marine Division of the New Jersey State Police provided a certification dated September 28, 2016.

77. Attached hereto and made a part hereof as Exhibit “O” is the certification of Michael C. Maslowski.

78. In his certification Trooper Maslowski indicates that the Marine Division of the New Jersey State Police has been called in to assist with water rescues of the Unprotected Inlet Beach over the years. See Maslowski Cert. ¶ 7.

79. In addition, the Marine Division of the New Jersey State Police regularly patrols the Hereford Inlet, and the State Troopers are aware of unreported water rescues which are effectuated by civilians. See Maslowski Cert. ¶ 11-13.

80. The State Troopers are aware of the drop off which is present on the Unprotected Inlet Beach and the vortex or whirlpool. See Maslowski Cert. ¶ 15.

81. The lifeguards provide surf wheel chairs for disabled beach goers at this entrance so that handicapped beach goers can access the Hereford Inlet Beach. See Exhibit “P” p. 8.

82. Attached hereto and made a part hereof as Exhibit “P” is a true and accurate copy of the North Wildwood New Jersey 2016 Information & Recreation Guide.

83. Unfortunately, the Smith drowning was not the only drowning which occurred as a result of the drop off on the Unprotected Inlet Beach.

84. On June 30, 2009, after the lifeguards had left for the day and signaled everyone out of the water, three women began to enter the water. See Exhibit “Q”.

85. Attached hereto and made a part hereof as Exhibit “Q” is a true and accurate copy of the North Wildwood Police Department Investigation Report from July 13, 2009, regarding the Hart and Watkins drownings.

86. On August 31, 2016, the survivor of that incident, Domonique McNeil was deposed in connection with this matter’s companion case.

87. Attached hereto and made a part hereof as Exhibit “R” is a true and accurate copy of the deposition transcript of Domonique McNeil.

88. While the women were standing at the water’s edge, the first woman, Domonique McNeil, moved about two feet to the left and fell as a result of the drop off. Ms. McNeil described this feeling as “a false bottom.” See McNeil Dep. 43:7-10

89. Shortly after Ms. McNeil fell into the water, her two relatives, Jamilah Watkins and Shayne Hart were also pulled in while trying to help Ms. McNeil out of the water. See McNeil Dep. 23:3-19

90. Eventually, the three were separated, and Ms. McNeil described the water as feeling, “like a twister, an underwater twister, but at the same time it was like pushing and pulling.” See McNeil Dep. 46:11-15.

91. McNeil went on to explain, “... if I tried to move, I wasn’t going anywhere. Like I was kind of trapped where I was at, and then it was more just waves. Like I don’t know, the water went from zero feet to like bottomless.” See McNeil Dep. 47:3-7.

92. She reached a man on the beach and he called 911. However, the two had lost sight of Ms. Watkins and Ms. Hart. See Exhibit “Q”.

93. The two young women were recovered from the water by emergency personal and transported to the hospital, where they were eventually pronounced dead. See Exhibit “Q”.

94. Additionally, as discussed in Exhibit “D” another woman drowned in July of 2011. Her belongings were found on the Unprotected Inlet Beach.

95. Nevertheless, the City of North Wildwood promotes itself as a safe destination for families. In an article entitled, “Things to do in North Wildwood, NJ,” posted on the USA Today website, it is noted that “Moore’s Inlet is the only beach in the Wildwoods that allows dogs and barbecues. It’s a good spot for fishing and renting personal watercraft.” See Exhibit “S”.

96. Attached hereto and made a part hereof as Exhibit “S” is a true and accurate copy of the above referenced article.

97. J. Richard Weggel, Ph.D, P.E., D.CE., has opined that due to the hazards at the Unprotected Inlet Beach, discussed in his report dated April 19, 2016, compel him to strongly recommend the Unprotected Inlet Beach at Hereford Inlet, North Wildwood, NJ, be closed.

98. Attached hereto and made a part hereof as Exhibit "T" is a true and accurate copy of two Certifications executed by Professor Weggel which include Report, Addendum Report, and Curriculum Vitae, and photographs which Professor Weggel will utilize if asked to testify at a hearing.

99. Professor Weggel stated, "the fact that steep slopes appear on all six surveys [which he reviewed] indicates that the conditions are persistent. See Weggel Addendum.

100. The dangerous slope conditions are below the water line and are not visible to pedestrians walking on the beach, furthermore, they are not generally predictable although they probably occur most frequently during ebb current flows in the inlet." See Weggel Addendum.

101. Dr. Weggel further advised, "I personally would not walk near the water line on the beach and I would advise my friends and loved-ones to stay away from this area." See Weggel Addendum.

102. Dr. Weggel also explained, "I am bound by the Code of Ethics of the American Society of Civil Engineers to hold paramount the safety, health, and welfare of the public. I believe that the city inlet conditions are a threat to public safety." See Weggel Addendum.

103. There are photographs which show the popularity of said beach, which Dr. Weggel opines is a threat to public safety. See Exhibits "U"- "Z".

104. Attached hereto and made a part hereof as Exhibits "U", "V", "W", "X", "Y", and "Z" are the above referenced photographs.

COUNT ONE

1. Plaintiffs repeat the allegations of the previous paragraphs as if same were set forth at length herein.

2. The Defendant City of North Wildwood by and through its agents, agencies, and

employees, is responsible for the maintenance, supervision, management, and control of the Unprotected Inlet Beach.

3. Defendant City of North Wildwood owes the public in general and the Plaintiffs as a member thereof, the duty to maintain, supervise, manage, and control their property so as not to injure the public's right to maintain public health, public safety, and public peace.

4. Defendant City of North Wildwood owes the public the duty to maintain, supervise, manage, and control their property so as not to jeopardize or injure the public's comfort, or the public convenience.

5. Defendant City of North Wildwood intentionally and recklessly markets and promotes the beach as a safe destination for beach goers to media, on their website, and in the North Wildwood New Jersey Information and Recreation Guide. Specifically, this information refers to the Hereford Inlet Beach from Surf Avenue north until the end of the beach (hereinafter "Unprotected Inlet Beach"). As such Defendant North Wildwood intends for beachgoers to frequent the beach in this location. However Defendant fails to guard the Unprotected Inlet Beach or adequately warn of the dangers associated with the Unprotected Inlet Beach.

6. For over ten years Defendant City of North Wildwood was aware of the life threatening hazard presented by the dangerous conditions created by a drop off that was often two feet from the shoreline at the Unprotected Inlet Beach, coupled with strong currents in the Hereford Inlet and a vortex and/or whirlpool in the Hereford Inlet.

7. Defendant the City of North Wildwood's conduct in maintaining, supervising, managing and controlling the Unprotected Inlet Beach causes beachgoers to swim, stand, and walk in ankle deep water.

8. When beachgoers take part in these activities they are exposed to the risk that they may be suddenly dropped in the ocean over their heads, and be pulled by the current and/or

vortex and/or the whirlpool out to sea and injured or killed by conditions that are present in the Hereford Inlet.

9. Moreover, there is no way for a casual beach user or tourist to know or appreciate that there is a real and certain substantial potential of injury and/or death to beach goers.

10. On July 27, 2012, Plaintiff, Brad Smith was unaware of the dangerous conditions created by the drop off and the currents and/or vortex and/or whirlpool when he was walking in ankle deep water with his seven year old daughter.

11. Defendant City of North Wildwood's conduct constitutes a nuisance as hundreds of beachgoers walk along the water's edge on this particular Unguarded Inlet Beach every day in the summer months. These people are unknowingly in constant danger of taking a wrong step and being swept into a vortex that can suck them under the water and drown them.

12. Defendant the City of North Wildwood knows that its actions and inactions interfere with the citizens and beachgoers of North Wildwood's public health, safety, and welfare and the public's right to be free from unnecessary danger.

13. Defendant City of North Wildwood's conduct is a direct and proximate cause of Brad Smith's death, as well as an unreasonable interference with the safety, health, and welfare of the citizens and beachgoers of North Wildwood's right to be free from danger.

14. Defendant City of North Wildwood's conduct, if not stopped, will continue to pose an interference to the health, safety, and welfare of the citizens and beachgoers of North Wildwood.

COUNT TWO

1. Plaintiffs repeat the allegations of the previous paragraphs as if same were set forth at length herein.

2. The Defendant State of New Jersey owns the Unprotected Inlet Beach area



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2000 Fire Road
Suite 200
Egg Harbor Township, NJ 08234

where Brad Smith, Brandy Smith, Scott Sunderland, and his two young children were walking.

3. The Defendant City of North Wildwood by and through its agents, agencies, and employees, is responsible for the maintenance, supervision, management, and control of the Unprotected Inlet Beach.

4. Defendant State of New Jersey owes the public in general and the Plaintiffs as a member thereof, the duty to maintain, supervise, manage, and control their property so as not to injure the public's right to maintain public health, public safety, and public peace.

5. Defendant State of New Jersey owes the public the duty to maintain, supervise, manage, and control their property so as not to jeopardize or injure the public's comfort, or the public convenience.

6. Defendant State of New Jersey was aware of dangerous conditions created by a drop off that was present on the Unprotected Inlet Beach, as well as strong currents in the Hereford Inlet and a vortex and/or whirlpool in the Hereford Inlet.

7. Defendant the State of New Jersey's conduct in maintaining, supervising, managing and controlling the Unprotected Inlet Beach causes beachgoers to swim, stand, and walk in ankle deep water.

8. When beachgoers are exposed to a risk that they will be pulled into the current and/or the vortex and/or the whirlpool and conditions that are present in the Hereford Inlet.

9. There is a real and certain substantial potential of injury and/or death to beach goers.

10. On July 27, 2012, Plaintiff, Brad Smith was unaware of the dangerous conditions created by the drop off and the currents and/or vortex and/or whirlpool when he was walking in ankle deep water with his seven year old daughter.

11. Defendant State of New Jersey's conduct constitutes a nuisance as hundreds of

beachgoers walk along the water's edge on this particular Unguarded Inlet Beach every day in the summer months. These people are unknowingly in constant danger of taking a wrong step and being swept into a vortex that can suck them under the water and drown them.

12. Defendant State of New Jersey knows that its actions and inactions interfere with the citizens and beachgoers of North Wildwood's public health, safety, and welfare and the public's right to be free from unnecessary danger.

13. Defendant State of New Jersey's conduct is a direct and proximate cause of Brad Smith's death, as well as an unreasonable interference with the safety, health, and welfare of the citizens and beachgoers of North Wildwood's right to be free from danger.

14. Defendant State of New Jersey's conduct, if not stopped, will continue to pose an interference to the health, safety, and welfare of the citizens and beachgoers of North Wildwood.

PRAYER FOR RELIEF

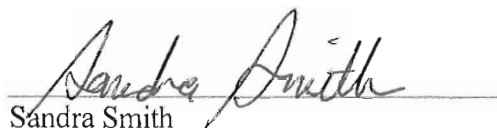
WHEREFORE, Plaintiff respectfully seeks judgment in its favor against Defendant as follows:

- (a) Defendants be immediately and permanently enjoined from allowing access to the Unprotected Inlet Beaches, reaching north of First Avenue and Surf Avenue until the Spruce Avenue and the Beach at the Sea Wall.

VERIFICATIONS OF SANDRA SMITH

I, Sandra Smith, of full age, hereby certify as follows:


1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on my behalf.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.


Sandra Smith

DATED: 10/4/14

I, Sandra Smith, as Executrix of the Estate of George Bradley Smith, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on behalf of the Estate of George Bradley Smith.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.


Sandra Smith, as executrix of the Estate
of George Bradley Smith

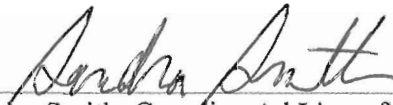
DATED: 10/4/14

I, Sandra Smith, as Guardian Ad Litem for my children, Kole and Brandy Smith, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on behalf of my children Kole and Brandy Smith.

2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.

3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Sandra Smith, Guardian Ad Litem for
my Children Kole and Brandy Smith

DATED: 10/4/16

VERIFICATIONS OF NICOLE GAETA AND KYLE SMITH

I, Nicole Gaeta, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on my behalf.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

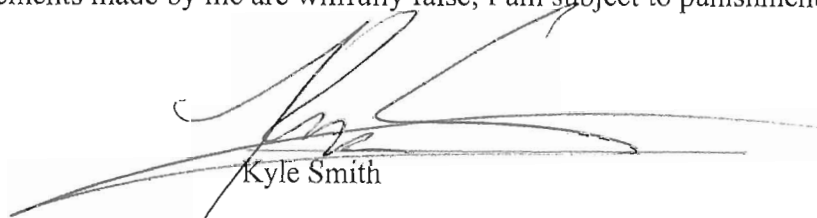


Nicole Gaeta

DATED: 10/4/16

I, Kyle Smith, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on my behalf.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Kyle Smith

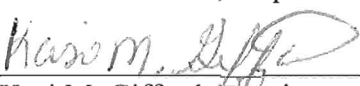
DATED: 10/4/16

NOTICE OF TRIAL COUNSEL

Paul R. D'Amato, Esquire is designated as Trial Counsel pursuant to Rule 4:25-4.

D'AMATO LAW FIRM

BY: 
Paul R. D'Amato, Esquire


Kasi M. Gifford, Esquire

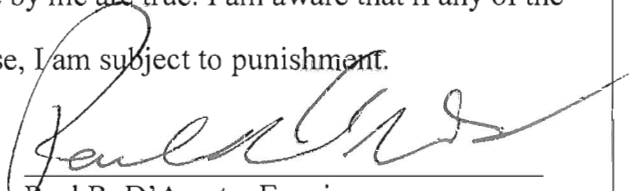
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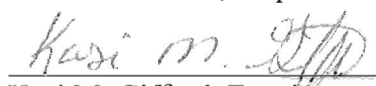
CERTIFICATION

Paul R. D'Amato, Esquire, of full age, certifies:

1. I am a member of the D'AMATO LAW FIRM and am entrusted with the preparation and trial of this case.
2. This case is the subject of a civil action captioned Smith v. City of North Wildwood, et als. Docket Number CPM-L-331-14 and CPM-L-324-16.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Paul R. D'Amato, Esquire


Kasi M. Gifford, Esquire

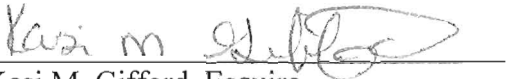
DATED 10/4/16

CERTIFICATION OF COMPLIANCE WITH RULE 1:38-7(c)

I, Paul R. D'Amato, Esquire, certify that confidential personal identifiers have been redacted from documents now submitted to the court, and will be redacted from all documents submitted in the future in accordance with Rule 1:38-7(b).



Paul R. D'Amato, Esquire

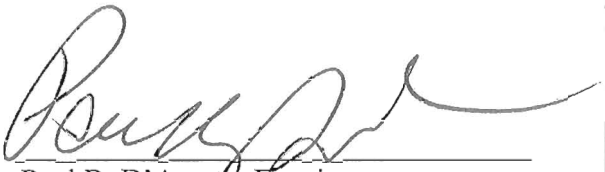


Kasi M. Gifford, Esquire

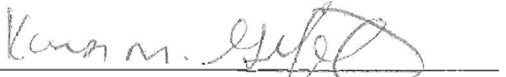
DATED: 10/4/14

GUARDIAN AD LITEM CERTIFICATION

I hereby certify that Plaintiff Sandra Smith as parent and guardian ad litem for her minor children Brandy and Kole Smith that does not have any interest contrary to that of the minors, and has consented to act as the Guardian Ad Litem.



Paul R. D'Amato, Esquire



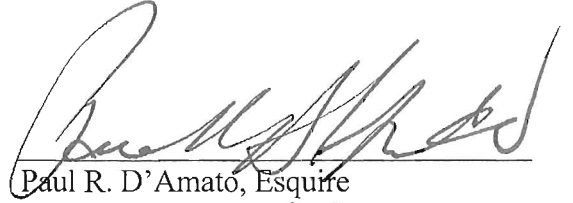
Kasi M. Gifford, Esquire

DATED: 10/4/16

D
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Suite 200
Egg Harbor Township, NJ 08234

NOTICE OF OTHER ACTIONS

Pursuant to Rule 4:5-1, the plaintiffs' attorneys hereby certify that there are two other cases pending in which the matter in controversy is the subject. These cases are docketed under CPM-L-331-14 and CPM-L-324-16.



Paul R. D'Amato, Esquire



Kasi M. Gifford, Esquire

DATED: 10/4/16

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D'AMATO LAW FIRM^{P.C.}

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Rose L. Scogno
PARALEGAL

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October 4, 2016

Clerk, Law Division
Cape May County Superior Court
9 North Main Street
Cape May Court House, New Jersey 08210

RE: SMITH V. CITY OF NORTH WILDWOOD, ET AL.
OUR FILE NUMBER |3100-P

Dear Sir/Madam:

Enclosed you will find the following:

- (XX) An original and copy of the Verified Complaint
- (XX) Case Information Statement; and
- (XX) Self-addressed stamped envelope
- (XX) Brief
- (XX) Certification of Kasi M. Gifford, Esquire
- (XX) Certification of J. Richard Weggel, Ph.D., P.E., D.CE
- (XX) Certification of Michael C. Maslowski
- (XX) Order to Show Cause
- (XX) Table of Contents
- (XX) Thumb Drive Containing Exhibits

Would you please:

- (XX) File, and
- (XX) Return a filed copy

Please charge our Attorney Collateral Account for any related costs, #19125.

Thank you kindly for your time and attention to this matter.

Very truly yours,

Paul R. D'Amato

PAUL R. D'AMATO

Enclosures

cc w/enc.: Sandra Smith
Nicole Gaeta & Kyle Smith
Honorable Julio L. Mendez, A.J.S.C.

D'AMATO LAW FIRM

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Attorney for Plaintiff

SANDRA SMITH, INDIVIDUALLY AND AS EXECUTRIX OF THE ESTATE OF GEORGE BRADLEY SMITH, AND AS GUARDIAN AD LITEM FOR HER CHILDREN KOLE SMITH AND BRANDY SMITH, NICOLE GAETA, KYLE SMITH;

Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

SUPERIOR COURT OF NEW JERSEY
CAPE MAY COUNTY - LAW DIVISION

DOCKET NUMBER: CPM-L-

A CIVIL ACTION

VERIFIED COMPLAINT

Plaintiffs Sandra Smith, individually and as executrix of the estate of her late husband George Bradley Smith (hereinafter "Brad Smith"), and as Guardian Ad Litem for Her Children Kole Smith and Brandy Smith, Nicole Gaeta, and Kyle Smith, the adult children of George Bradley Smith, residing in Pennsylvania, by way of Verified Complaint bring this action for injunctive relief seeking to have the North Wildwood beach in the area of Hereford Inlet permanently closed to the public from Surf Avenue and the beach to Spruce Avenue and the beach at the sea wall.

FACTS

1. At all times relevant, Defendants, the City of North Wildwood and the State of New Jersey, through their agents, servants, and/or employees, owned, operated, managed, controlled, and supervised the beaches along the North Wildwood Atlantic Ocean coast line, which include the Hereford Inlet Beach, the Inlet Beach, Moore's Beach, Moore's Inlet Beach, and the Point (hereinafter "Unprotected Inlet Beach"), and the bathers, sun bathers, strollers, and waders invited to visit and use those beaches.

2. On July 27, 2012, the decedent George Bradley Smith (hereinafter "Brad Smith"), his wife Sandra, his children Brandy and Kole went to the North Wildwood beach located at Surf Avenue. The Smiths were accompanied by Scott Sunderland, his wife, and their two young children. This beach was protected by lifeguards employed by the City of North Wildwood.

3. Brad Smith with his daughter Brandy, Scott Sunderland, and his two children decided to go for a walk which took them north along the shoreline.

4. To the North of the last lifeguard stand located at Surf Avenue is a beach referred to as the Inlet Beach, Moore's Beach, Moore's Inlet Beach, and the Point.

5. During this walk Brad Smith, Scott Sunderland, and their daughters encountered a drop off which was not visible because it was under the water.

6. Because of this drop off, which was as steep as a cliff, the Smiths and Sunderlands although only wading, suddenly fell into deep water which was far over their heads.

7. Scott Sunderland was able to return to land with his daughter on his back.

8. After reaching land, Scott Sunderland flagged down two jet skiers, one of whom was able to save Brandy Smith.

9. On April 1, 2016, Scott Sunderland at his deposition in a related companion case testified as follows:

Q: Okay. Now, from the time you started walking from the protected beach onto that area that was unprotected—well, let's go back a little bit. Going back to the day of the accident, before you decided to take the walk, as you have described many times today, towards Moore's Beach or Moore's Inlet, did you know that the area that you are walking—about to walk on was unprotected in the sense that there were no lifeguards down there?

A: No, we didn't.

Q: On the day of Brad's drowning, was that the first time that you and Brad had ever walked from the protected beach down towards Moore's Inlet or Moore's Beach?

A: Yes, that was the first time we walked down there.

Q: As you were walking from the protected beach towards Moore's Beach, did you see signs on poles like what is shown in Sunderland-22?

A: No.

Q: Okay. As you are walking from the protected beach to Moore's Beach, did you see any signs like what is shown in Sunderland-23 which says "High risk rip current area"?

A: No.

Q: As you are walking from the protected beach towards Moore's Beach, did you see any signs like Sunderland-24 that say, "Danger, Unprotected Beach"?

A: No.

Q: As you are walking from the protected beach to Moore's Beach, are you seeing any signs like whatever this thing is in Sunderland-25 in the middle of the photograph?

A: No.

See Sunderland Dep. 35:8-10.

Q: And how deep is the water on you just before you go into the water?

A: Calf

See Sunderland Dep. 35:8-10.

Q: As you were walking along, I think you said roughly calf-deep water?

A: Um-hum

Q: Is that a yes?

A: Yes, I would say top of my calf.

See Sunderland Dep. 130:4-131:15.

Q: Were you making any attempt to walk in an absolute straight path, or were you just ambling along and you fell?

A: We were just walking along the water.

Q: Because here's my question. Since you were not making an attempt to walk in an absolute straight line, is it possible that as you approach the location of the incident you were stepping a little bit to the right here a little bit to the left there?

A: Yeah, I mean we could have, but we were never deeper than the top of my calf.

See Sunderland Dep. 114:21-115:6.

Q: You are heading back. And were there times as you are walking back before you fell into the hole that all of you or some of you were walking in ankle-deep water as opposed to mid-calf water?

A: Yes.

See Sunderland Dep. 129:23-130:3.

Q: As you are walking in the fashion as well as you can describe it based on your memory, do you remember what happened, how you felt and what happened to you as you found yourself going in this water?

A: As I was walking, I took a step on my left leg and it just dropped.

Q: You mean your left leg went out and you went...

A: No, just like I was walking and then it's just like I just stepped right into, like, nothing. It was like it almost slide, like it slipped, and then with that I just went over. So it was like my leg just went out from underneath me.

See Sunderland Dep. 36:16-37:5.

...

Q. And what did you see when you had that observation [seeing Brad and Brandy]?

A: They were separated. And I'm going to approximate they were off the beach about a hundred, 120 feet.

Brandi was closer to inside the inlet, Brad was closer to

the ocean, and they were getting further apart. Brandi was staring directly at me, and Brad was on his back facing Brandi, so looking back towards the inlet. And he was just kind of almost—almost on his back like just going with the current. And it seemed like Brandi was stuck in this—she wasn't getting turned around in like a whirlpool. She was on this outer side of it, and then it seemed like Brad was caught in this other—almost like a river and he was getting pulled further away from her. See Sunderland Dep. 41:20-42:12.¹

10. Attached hereto and made a part hereof as Exhibit "A" is a true and accurate copy of the complete transcript of the deposition of Scott Sunderland.

11. On March 10, 2016, Brandy Smith at her deposition in a related companion case testified as follows:

Q: and were you and your dad at—walking in the water?

A: Yes. Like, we—it was only, like, to our ankles, at first, yeah. It was, like, we were still, like, right here, close to the sand, so you could, you had your feet on sand for a while you were walking.

Q: Um-hum. And there came a time when you and your dad somehow went into the water. Right?

A: Yeah.

Q: How did that happen?

A: I can't remember much, but like—how it happened, I—my eyes were closed, and I didn't know—like, I couldn't see anything much. And—and it just happened. And then we ended up somewhere in the ocean.

See Smith Dep. 21:5-19.

...

Q: All right. After you fell into the water, okay, do you remember seeing your dad at any time, after you fell into the water?

A: Yes.

Q: And do you—and where was he? How far was he from you?

A: He was pretty close. Just like a little bit far away from me, not that far.

Q: Okay. Was he saying anything to you?

¹ The correct spelling of Brad Smith's daughter's name is "Brandy". However, the spelling "Brandi" was inadvertently used in some deposition testimony, and has been referenced as such to maintain the word-for-word integrity of the deposition testimony.

A: Yes he was saying my name a lot. And then I don't remember much about—all I remember was him saying my name.

Q: Okay. And you remember the fellow on the Jet Ski picking you up?

A: Yes.

Q: All right. When the fellow on the Jet Ski picked you up, where was your daddy at that point in time?

A: I didn't see him anymore. I don't know—I didn't know where he was.

Q: All right. When you last saw daddy, what was he doing?

A: Laying on his back.

Q: Okay. Do you see how long this conference room is here?

A: Yes.

Q: Was he as far away from you as the length of this room, or more, or closer?

A: Closer.

Q: Okay. And what's the very last words you remember hearing daddy say?

A: Brandy.

See Smith Dep. 29:19-30:25.

12. Attached hereto and made a part hereof as Exhibit "B" is a true and accurate copy of the complete transcript of the deposition of Brandy Smith.

13. Brad Smith struggled to stay afloat and was sucked beneath the sea as a result of the vortex also known as the whirlpool.

14. Brad Smith's body was recovered on the beach during the early morning hours of July 30, 2012.

15. On February 16, 2016, Chief of the North Wildwood Beach Patrol since 1986, Joseph Anthony "Tony" Cavalier (hereinafter "Chief Cavalier") in the related companion case testified as follows:

Q: Okay. If I said to you, what is your understanding of what happened to Mr. Smith, do you have one?

A: How I think it happened?

Q: Yes.

A: Yes.

Q: Okay. And before you tell me how you think it happened, can you tell me the following: You didn't see it happen; did you?

A: No.

Q: All right. All right. So, you're basing your forthcoming answer as to how it happened based on what?

A: Being down there all the time.

Q: Okay. So, why don't you tell me how you think it happened.

A: At certain times of the day, when the tide is in or out, there's a drop off along that section of the beach,

Q: Okay. What do you mean by a drop off?

A: It literally drops off.

Q: Okay. And how long has that particular condition existed as far as you know?

A: The inlets changing all the time. Every year, it changes.

See Cavalier Dep. 41:20-42:19.

16. Attached hereto and made a part hereof as Exhibit "C" is a true and accurate copy of the deposition transcript of Chief Cavalier.

17. When questioned about his knowledge of the drop off, Chief Cavalier testified as follows:

Q: ... the drop off runs how---how far, or how long is it?

A: Twenty yards.

Q: Okay. And is that drop off, and I know you said this, but I'm kind of having difficulty understanding it. Is every season that drop off someplace along that Inlet Beach?

A: Yes.

Q: Okay. Does the drop off, season to season, move?

A: Yes.

Q: Okay. And all the years that you've been part of the North Wildwood Beach Patrol, is this drop off, does it, like, move from, let's say Point A, and then the next year, it's like a mile away, or is there a certain limitation that it stays within?

A: Limitation.

Q: And what would you say that is? Like, is it, like a quarter of a mile, a tenth of a mile that it moves?

A: Tenth of a mile.

See Cavalier Dep. 56:5-25.

Q: Okay. Were there any signs on July 27, 2012, that would have alerted Brad Smith as to this drop off?

A: No.

See Cavalier Dep. 58:8-11.

18. Chief Cavalier was asked whether or not there would have been any signs at the water's edge warning of the hazardous conditions. Chief Cavalier responding in the negative testified:

Q: Now, you do have an understanding that Mr. Smith and his family and the Sunderland family had been sitting on a protected beach on July 27, 2012, and had—and that Mr. Sunderland with his son, and Mr. Smith and his daughter decided to take a walk on the beach? Are you aware of that?

A: No.

Q: Okay. As they are walking from the protected beach, you would call it the last one, First and Surf. Right?

A: Yes.

Q: As they're walking, and they're going towards Moore's Beach, would there be any sign warning them of any hazardous condition located near the water's edge, as they're walking?

A: No.

See Cavalier Dep. 72:13-73:3.

19. Furthermore, when Chief Cavalier was asked about the visibility of the drop off he testified as follows:

Q: Okay. When you referred to the drop off earlier in your testimony, does this photograph show what you call a drop off?

A: No.

Q: Okay. How is a drop off different than the photograph that you have in your hand?

A: It's along the water's edge. It's in the water.

Q: So, that—wait. Okay. When you say it's in the water, so that if I'm standing on land, I can't see the drop off, correct?

A: Yes.

Q: Okay. That area that's shown in that photograph, is that Moore's Beach?

A: No.

Q: Is that Inlet Beach?

A: Yes.

See Cavalier Dep. 82: 23- 83:16.

20. Moreover, Chief Cavalier when asked if this drop off is consistently present, testified regarding the details of the drop off as follows:

Q: All right. Virtually, all the questions I'm going to be about that drop off. Because I want to try to understand where that drop off is, how it occurs. And you've indicated that it moves along with the shore line. Is that right?

A: Yes.

Q: So that's a dynamic process?

A: Yes.

Q: But that it is relatively constant, and they're not your words, so that it's a feature that, that while it moves, it doesn't really go away; does it?

A: No.

Q: It doesn't move from day to day; does it?

A: Yes. The Inlet changes every day.

Q: Okay.

A: The currents.

Q: Okay. Does the drop off change during the tide?

A: Yes. Certain tides, there is no drop off.

Q: Okay. What kind of tides is there no drop off, and what kind of tides is there a drop off?

A: High tide. High tide, it's a regular beach.

Q: Okay. And that's because the drop off—

A: Would be the further out.

Q: --is so far out that you couldn't walk to it?

A: Correct.

See Cavalier Dep. 111:6-112:15.

A: When the water is out is when there is a drop off. See Cavalier Dep 113:9-10.

Q: Okay. Do you know whether the currents are scouring that Point, that Lindsay calls a Point?

A: I believe it scours the whole Inlet Beach, the way the currents run, not just there.

See Cavalier Dep 118:15-21.

21. Chief Cavalier further testified:

Q: Okay. Well, when the drop off appears, how big an area is it?

A: Ten, fifteen yards.

Q: Okay. And how—how—what's the drop? In other words, if someone is walking, and they encounter the drop off, how far will they step down?

A: Over their head.

Q: Okay. All right. So, it's sort of a cliff?

A: I don't consider it that.

Q: Okay.

A: It's when the tide's out, it's just the water drops off.

Q: All right. It's a sudden drop off?

A: Yes.

See Cavalier Dep 119:1-17

22. When questioned as to whether or not the drop off was a factor in the Smith drowning, Chief Cavalier explained:

Q: Would I encounter the drop off—in this case, the Sunderland version is that Smith, Sunderland and the children were walking in ankle deep water, parallel to the beach.

A: Yes.

Q: Okay. And two of them just fell away, the beach fell away. And you indicate, you theorized they fell in the drop off?

A: Yes.

Q: Okay. What I'm trying to understand is, would the drop off have been running along the beach, and they got too close to it and slide from the side, or would they have encountered a drop off that ran perpendicular to the direction they were walking? Do you understand what I'm asking you?

A: Do you want me to explain how I think?

Q: Yeah, I do. Yeah. Very much.

A: They were walking along, and they came to the spot where it's—I call a drop off, and it was over their head, and they stepped into it.

See Cavalier Dep. 120:20-121:25.

23. Chief Cavalier clarified that the drop off is discussed by other lifeguards amongst themselves, and is recognized as a risk to beachgoers, even those who are simply walking at the water's edge:

Q:...and do you discuss where the drop off is with any of your personnel during the course of a summer?

A: No.

Q: Do they discuss it with you?

A: Yes.

Q: Okay. So, the drop off is a phenomenon that the guards will discuss—

A: Yes.

Q: --amongst themselves? And you recognize it as a risk?

A: Yes.

...

Q: You understand that the drop off is a risk to people who are using the beach?

A: Yes

Q: And you recognize that it's a risk that comes up to someone who is simply walking, not swimming?

A: Yes.

See Cavalier Dep. 122:7-123:4.

24. Chief Cavalier has recognized this risk for ten years, Chief Cavalier explained why he has recognized this risk for ten years at his deposition:

Q: Is that correct? And how long have you recognized that risk?

A: Ten years.

Q: What caused you to recognize that risk 10 years ago?

A: Some of the rescues we had down there (emphasis added).

Q: Okay. Can you tell me which—what rescues you had, and where they would be documented, that led you to recognize that risk?

A: No. I—it's my own personal experience of going down there, and looking at it.

See Cavalier Dep. 122:7- 123:16.

25. Chief Cavalier makes recommendations to the North Wildwood Mayor and Council regarding which beaches should be guarded every summer. Chief Cavalier described the process as follows:

Q: Okay. I have read a series of resolutions that were passed by the City of North Wildwood relative to what beaches would be protected for an upcoming summer season. And you're probably familiar with those resolutions; aren't you?

A: Yes.

Q: Right. And all the resolutions, there's a reference to the council and the mayor having considered the recommendations of the North Wildwood Beach Patrol?

A: Yes.

Q: All right. Were those recommendations given to the mayor and the counsel of North Wildwood on an annual basis, like every year?

A: Yes.

Q: And were they typically given a couple months before the beginning of the summer season?

A: A month.

Q: Okay. And were your recommendations that are referenced in the resolutions in writing from you to the mayor and council?

A: Yes.

See Cavalier Dep. 27:25-28:1-21.

26. Chief Cavalier noted that the drop off is present every year, he explained that there are two drop offs and compared the two as follows:

Q: The drop off is, is present every year; isn't it, someplace or other?

A: Yes.

See Cavalier Dep. 131:25 – 132:1.

Q: Okay. Okay. The drop off that we've been talking about is typically how deep?

A: Ten.

Q: Okay. And are there other areas along bay of these beaches where there are other drop offs?

A: Yes.

Q: Okay. Are those drop off, can they be as deep as 10 feet, also?

A: 50 feet. 50 to 60 feet.

Q: Okay.

A: That's the drop off at Moore's Beach, where they fish.

See Cavalier Dep. 133:20- 134:6.

27. Chief Cavalier acknowledged that the drop off was present at the location of the Smith drowning on July 27, 2012, when he testified as follows:

Q: Okay. So if I follow you correctly, the drop off, when the drowning occurred, was at the Point, and it was about 10 or 15 feet deep?

A: Yes.

See Cavalier Dep. 135:20-23.

28. Chief Cavalier was also personally aware of the vortex or whirlpool and explained his knowledge as follows:

Q: Okay. He [Dr. Stewart Farrell] also says that when the back bay is going into the ocean, that there is a vortex or whirlpool in the body water called the Inlet?

A: Yes.

Q: All right. Given the number of years that you have been on the beach patrol, is that vortex or whirlpool created every time the back bay moves out to the ocean?

A: Yes.

Q: All right. I know you're not a research scientist, but what is your understanding of what causes the whirlpool or vortex?

A: I believe it's the bay hitting the ocean at that point.

See Cavalier Dep.43:15-44:5.

Q: All right. How large is this whirlpool or vortex that you have seen in the past in the Inlet?

A: Twenty-five yards.

Q: Okay. And does it appear to be circular.

A: Yes.

Q: Okay. So, the diameter across would be about 25 yards?

A: Yes. I'm sorry(emphasis added).

See Cavalier Dep.45:4-18.

29. Chief Cavalier was of the opinion that an average swimmer could not swim through the vortex or whirlpool, he stated:

Q: That's okay... Could an average swimmer swim through the vortex?

A: No.

See Cavalier Dep. 45:4-46:25.

Q: Okay. So, at Moore's Beach, before July 27, 2012, was that area consistently 50, 60 feet deep?

A: Yes.

Q: All right. For what length?

A: Twenty yard, twenty-five yards.

See Cavalier Dep. 53:12-16.

Q: Okay. And Dr. Farrell, in one of his statements, and hopefully we can get to it today, he says that sometimes when the back bay is going to the ocean, that the water is moving at five miles per hour, the water that's going out to the ocean.

Q: Would you agree with him?

A: Yes.

Q: Would you agree that it could be more than five miles per hour?

A: Yes.

Q: Ten miles per hour?

A: No, not—not that—

Q: Somewhere between five and ten miles per hour?

A: Yeah.

See Cavalier Dep. 60:16- 61:6.

30. Chief Cavalier acknowledged that the vortex or whirlpool is present in the same location as the drop off:

Q: The vortex that you talked about before, how far is the vortex from the drop off?

A: That's—that's where it is.

Q: Oh, okay. All right. So, the vortex is, is related to—

A: Yes.

Q:-- the drop off? Okay.

See Cavalier Dep. 131:2-13.

31. North Wildwood promotes and encourages the use of Moore's Beach since it built stairs which provide access to the Unprotected Inlet Beach. There are condominiums

present directly over the sea wall at Moore's Beach. The residents of those condominiums have direct access to the Unprotected Inlet Beach. Chief Cavalier testified as follows:

Q: Okay. The individuals that own the condominiums, the actual condominium units, I meant to say, in that condominium building, is there any prohibition from those individuals sunbathing at Moore's Beach?

A: No.

Q: Okay. In fact, there is—there are stairs that people can access from the parking lot to get to Moore's Beach. Correct?

A: Yes.

Q: ... The closest stairs that exist in order for someone to get to Moore's Beach would be the stairs that are located from the parking lot that we see in this particular exhibit. Correct?

A: No.

Q: Where else?

A: Down by the corner at Moore's Beach.

Q: Let me see.

A: All the way down. There's a set of steps that goes right on the beach.

See Cavalier Dep. 51:19 – 52:15.

32. North Wildwood provides and maintains a parking lot in the Hereford Inlet Section, which Chief Cavalier credits for making First and Surf Avenues, a more crowded beach, as noted in the following deposition testimony:

Q:... "Two rescues, guards, Goss and Muso did a good job on controlling the crowd at First and Surf. There are heavy crowds at First Street due to the parking lot." Can you explain what that means that there are heavy crowds due to the parking lot? What's the connection?

A: Well, there's a--- the city made a parking lot, and people come down to the beach and park there, so they go out on First and Surf.

Q: Got it. And from that parking lot that we've been referring to that's next to the condominiums, individuals that park their cars there, can take one set of steps to get right on Moore's Beach?

A: Yes.

33. Chief Cavalier testified that on July 27, 2012, there were no signs on the Unprotected Inlet Beach prohibiting walking in ankle deep water, or walking in water that goes to your mid-calf. See Cavalier Dep. 62:1-8.

34. There are “No Swimming” signs on the Unprotected Inlet Beach. However, these signs were not regularly enforced by the beach patrol, due to the large area of the Unprotected Inlet Beach. Chief Cavalier testified to this fact as follows:

Q: All right. I handed to you exhibit 19, and then I took it back. And you identified the area where this, what is shown this particular photograph, and you would agree that the sign on the top means no swimming?

A: Yes.

Q: All right. And is it fair to say that when you see that sign, it also means it’s not a protected beach?

A: Yes.

Q: Okay. And below, there’s another sign that says, “No dogs, cats, or any other domestic animals on beach May 1 to October 1,” and it references Ordinance No. 1416. Was it the responsibility, before Mr. Smith’s drowning, of the North Wildwood Beach Patrol to enforce the no swimming sign and the no animal sign?

....

A:...you mean, if people are in the water, did we enforce that [no swimming] sign?

Q:Yes.

A: No.

Q: Why not?

A: It’s too big an area to cover (emphasis added).

See Cavalier Dep. 70: 3- 71:10.

35. Though the lifeguards would not regularly enforce the “No Swimming” Signs they did listen to the radio and effectuate rescues on the Unprotected Inlet Beach every summer, as evidenced by Chief Cavalier’s testimony:

Q: All right. The—let’s see if we can do it this way: were there any occasions where North Wildwood lifeguards had to effectuate a rescue of a person that was in the water off of Moore’s Beach?

A:Yes.

Q:.. were there occasions before July 27, 2012, where lifeguards of the North Wildwood Beach Patrol had to effectuate a rescue of someone that was swimming off of what we've been calling the Inlet Beach?

A: Yes.

Q: Okay. From your experience, is it safe to say that in all the years that you have been a member of the North Wildwood Beach Patrol, that before July 27, 2012, there were occasions during the summer season when North Wildwood lifeguards had to effectuate rescues of individuals swimming both off the Moore's Beach and off of the Inlet Beach?

A: Yes.

Q: Okay. Typically, how would your lifeguards be alerted to the fact that they had to effectuate a rescue off of Moore's head—Moore's Beach and the Inlet Beach?

A: Police department, we would monitor the police radio. The police would get a call, somebody's in distress, Moore's or the Inlet, and we would respond.

See Cavalier Dep. 91:10- 92:17.

36. Additionally, Chief Cavalier acknowledged that about a dozen times a summer, the lifeguards must save someone who has tried to swim to Champagne Island, a sand bar, located off of the Unprotected Inlet Beach, Chief Cavalier explained:

Q: Is there any prohibition from a person who's on the Inlet Beach, not Moore's Beach, the Inlet Beach from swimming to Champagne Island? A prohibition.

A: No.

Q: Okay. Is there any prohibition for someone swimming to Champagne Island from Moore's Beach?

A: No.

Q: Okay. How many rescues in a given summer before July 27, 2012, did your lifeguards have to effectuate relative to people who were trying to swim from Moore's Beach and/or the Inlet Beach to Champagne Island and vice-versa?

A: About a dozen a summer.

See Cavalier Dep. 101:5-21.

37. The Beach Patrol Daily Report Dated August 19, 2012, about three weeks after Brad Smith's drowning, states that there were, "Eight Preventions at the Point," Chief Cavalier explained a prevention as follows:

Q: Okay. Now, let me show you what's been marked for identification as Exhibit 44. It's a daily report dated August 19, 2012. And at the bottom, the same category, again, it says, "Eight preventions at the Point." Okay. Now, when it says eight prevents, do that—if you can tell, does that mean preventing eight people from going into the water? What—I don't understand this term prevention.

A: They were trying to stop people from going in the water there.

See Cavalier Dep. 103:6-19.

38. City officials, including Chief Cavalier, have acknowledged in sworn testimony that beach goers who frequent the Unprotected Inlet Beach are inclined to engage in behaviors otherwise prohibited by various North Wildwood Ordinances.

39. Such activities include, but are not limited to, drinking alcoholic beverages on the beach, utilizing floatation devices in the water, playing games, and bringing their dogs to the beach.

40. When asked about any discussions between Chief Cavalier, the Mayor, and City Council regarding whether or not to close the Unprotected Inlet Beach, Chief Cavalier testified as follows:

Q: Was there any discussion while you were the chief of the beach patrol of North Wildwood, before July 27, 2012, at a mayor and council meeting of the City of North Wildwood, about having a lifeguard or lifeguards with lifeguard stands in what we've been calling the Inlet Beach area?

A: No.

Q: Okay. Same question for Moore's Beach... Before July 27, 2012, did you ever attend a meeting of the mayor and council where there was a discussion about

having a lifeguard and a lifeguard, perhaps with a stand, at what we've been calling Moore's Beach?

A: Yes.

Q: Okay. Given the number of years you've been the chief of the beach patrol, can you give me your best estimate as to how many times you spoke to the mayor and council at one of their meetings?

A: About Moore's Beach?

Q: Yea.

A: Once.

Q: Okay. And when was that?

A: Twelve years ago.

Q: Okay. And can you tell me what you said?

A: We had Mayor Palumbo, who was the mayor, a discussion was brought up about should we guard the Moore's Beach again. And the mayor and I went to the beach, and he actually went around asking people how they felt about a lifeguard being back there. And 90 percent of the people didn't want a lifeguard there.

Q: Did they tell you why they didn't want a lifeguard there?

A: They want to be able to do what they want to do.

Q: And one of the things they wanted to do was drink alcoholic beverages?

A: Yes.

Q: All right. What else besides drinking and alcoholic beverages did they want to do?

A: Dogs, Jet Skis (emphasis added).

Q: Okay. And since that time, have you, as the chief of the beach patrol, let the people do what they wanted to do when you were there with the then mayor?

A: If we got complaints from the public, the police department would respond, if people were out of control with—the alcohol, or the dogs.

Q: Okay.

A: And we finally got it under control.

Q: Okay. When did you finally get it under control?

A: Well, with the dogs, we eliminated that. But the alcohol, you never eliminate.

Q: Since July 27, 2012, I have been to Moore's Beach and the area that you call the Inlet Beach several times, and I have witnessed police officers of the City of North Wildwood walking on the beach. Have you made that same observation?

A: Yes.

Q: All right. Did you ever talk to the chief of the North Wildwood Police Department about having North Wildwood police officers patrol Moore's Beach and the Inlet Beach?

A: Yes.

Q: All right. And going back as many years as you feel comfortable telling me, how long have you been discussions with the chief of police of the City of North Wildwood about patrolling Moore's Beach and the Inlet Beach?

A: The last 10 years.

See Cavalier Dep. 31:5- 34:3.

41. One year to the day prior to Brad's drowning, on July 27, 2011, Shorenewstoday.com posted an article entitled "Guard Chief Warns About Swimming in Inlet." This article was posted a result of the drowning fatalities of a Baltimore woman off of the unprotected inlet beach. Chief Cavalier is quoted as saying:

The Inlet can look like it has calm water, but it is deceiving. **The water starts off shallow but then about two feet out from shore it can drop off (emphasis added).** You can go from knee deep to right over your head real quick. There's a certain point off the shore, you can see it from the sea wall, the water looks like a washing machine out there. See Exhibit "D".

42. Attached hereto and made a part hereof as Exhibit "D" is a true and accurate copy of the above referenced article.

43. Lieutenant David Lindsay, a retired 32 year veteran of the North Wildwood Beach Patrol, was deposed in connection with this matter's companion case on March 2, 2016. In that deposition, Lieutenant Lindsay testified as follows:

Q: In the North Wildwood Beach Patrol, could you draw with a red marker where the inlet zone was?

A: Sure.

Q: All right. Now, you know the city better than I do... can you give me street names?

A: Yes, Sir.

Q: Okay. Go ahead.

A: Inlet zone went from Surf Avenue down to the ocean, along the waterfront to the rock pile at Second and JFK, and then back along the bulkhead or walkway up to, I believe it's First and JFK.

Q: First?

A: First and Surf.

See Lindsay Dep. 13:9-23.

Q: For how many years before July 27, 2012, were you assigned for the summer to, we'll call it, the inlet zone?

A: I believe in '98, I was moved to the Inlet.

Q:...I'm surmising that because of your experience and your professionalism, you were assigned to the inlet zone, as opposed to other zones. Would that be a fair statement?

A: Well, I was assigned to the inlet zone in '90—the dates aren't exactly clear, but around '96, I was put in charge of the Jet Ski.

Q: Right.

A: And then the Jet Ski was more or less put in charge—it was assigned to the Inlet. So, I went with the Jet Ski.

...

Q:... am I correct in saying that the area where, is, say Moore's Beach and the Inlet Beach is some of the more dangerous beach area in North Wildwood, because of these currents that we've been talking about?

A: That's true.

See Lindsay Dep. 20:8-21:13.

44. Attached hereto and made a part hereof as Exhibit "E" is a true and accurate copy of the deposition transcript of Lieutenant Lindsay.

45. Since Lieutenant Lindsay was in charge of the Inlet section of the beach he was asked at depositions how he knew whether or not someone was in need of assistance on the Unprotected Inlet Beach. Lieutenant Lindsay testified in the following manner:

Q: According to these records, which we'll get in a moment, it appears to us that there were occasions where lifeguards, and not just saying you necessarily just yet,

...

Q: Where lifeguards that were posted in the inlet zone had to effectuate rescues up north, the Moore's Beach, and at the Point area. Is that correct?

A: Yes, sir.

Q: All right. And how would you, if you were posted in the inlet zone, know that somebody was in trouble at the beaches, which is Moore's Beach, the Point area? How would you know that?

A: Well, I actually was, you know, a lot of guys made jokes, because I would always listen to scan. But because of the section of the beach I was in charge of, I would have my radio on scan all the time, so I I'm listening directly to dispatch.

See Lindsay Dep. 26:4-22.

46. Lieutenant Lindsay described the Hereford Inlet Conditions as follows:

Q: Okay. If you had to give me an estimate of the number of times when you were assigned to the inlet zone before July 27, 2012, that you had to assist in rescues of people who were trying to swim from Moore's Beach to Champagne Island, or back, give me your best estimate. How many times a summer?

A: Twice a week.

Q: Okay. And I have a buddy who was raised down here in Cape May County. And he told—he's a tremendous swimmer, but he was explaining to me how difficult that swim is, because of the currents. Correct?

A: Yea. It's treacherous.

See Lindsay Dep. 29:8-20.

47. On July 1, 2013, Lieutenant Lindsay was recorded by a Mrs. Simpson on the North Wildwood Beach. This conversation was transcribed. See Exhibit "F". Lieutenant Lindsay was questioned about the conversation at his deposition.

48. Attached hereto and made a part hereof as Exhibit "F" is a true and accurate copy of the above referenced transcription.

49. Lieutenant Lindsay, who is of the opinion that the Unprotected Inlet Beach needs to be shut down to prevent future drownings, clarified at his deposition that he believes the reason the beach has not been shut down is because the local establishments and people would be against the beach closure. Lieutenant Lindsay described his reasoning as follows:

Q: ... What was the pressure that whomever that was associated with the bars was putting on to keep Moore's Beach open, as opposed to closing it?

A: Well, to be honest with you, I—I don't know any pressure. When I was in that conversation [the recorded conversation with Mrs. Simpson] I was really just talking about my own personal opinion. And what I did a lot with—and you, know, I still to that day feel the same way, it has nothing to do with how the city or the bartenders—the bar owners, but it's just my personal opinion would be that if you were to—if you were to shut that section of the beach down, which is really the—the only way you're going to prevent another drowning, and everything I say there, you know, I'll stand by. I would have told Mrs. Simpson---

Q: Right.

A:-- the same thing if she told me she was with you guys.

Q: Right.

A: So, it's not a matter of any of the bar owners, or anyone. It's just my personal opinion that if you were to shut down this section of the beach—

Q: Right.

A:--which, and you said you were there in the—you know, the peak of the summer, I don't know the bar owners that are right over the bulkhead would be too happy. And I know for a fact that the—the local people, who go to that beach, just to get away from the lifeguards, you—you know, you wouldn't have a happy bunch of people.

See Lindsay Dep. 32:11-33:18

50. Lieutenant Lindsay made a statement to Mrs. Simpson regarding the number of drowning fatalities on the Unprotect Inlet Beach. When questioned about this statement at deposition, Lieutenant Lindsay testified:

Q:... Now, let me ask you this: you told Mrs. Simpson on the bottom of page 3, "You know, there's seven drownings in nine years."

A: um-hum.

Q: When you say drownings, are they fatalities?

A: Well, to be honest with you, there were four in nine years. What I would do is, I would sit here in my truck, and I would see people down there.

Q: At the Point, you mean?

A: At the Point.

Q: Yeah.

A: And what I would do is, I would go down there, and try to express to the people, you know, how dangerous it is down there. So, when I said that, it was just trying to get people—

See Lindsay Dep. 34:20-35:9.

51. Lieutenant Lindsay was asked at his deposition why the Unprotected Inlet Beach remains unprotected despite the number of drowning fatalities and rescues on the Unprotected Inlet Beach. He responded in the following manner:

Q:... You've been very candid and truthful today, and I respect that. And I'm almost finished. I just want to ask you a question. I've been through all of these reports, okay, yours and others. **With all the rescues that are documented, I keep asking myself, why wasn't there a lifeguard stand with lifeguards close to Moore's Beach, as opposed to being at, First and Surf?**

A: **First and Surf, yeah. Well, the answer I would give to that question is, when you put a lifeguard stand on the beach, you're telling the public that's a safe place to swim. And that area of the beach is anything but safe (emphasis added).** Forget about the currents. It's a boating channel. I explained to my—Will the other day, we joked about, we thought we were going to see Rodney Dangerfield come in on Caddyshack with the horn going, Jet Skis, you know, kite surfers, speed boats. You name it. I mean, you've been down there.

Q: Yeah.

A: On a—on July 4th, it's—we would drive down there, and we'd be like, let's get out of here. It's—as a lifeguard, it was—we didn't want to be anywhere near it.

See Lindsay Dep. 43:20-44:18.

52. **Lieutenant Lindsay expressed extreme concern regarding the lack of warning to beachgoers such as Brad Smith. He truly believes that the only way to prevent another drowning at the Unprotected Inlet Beach is to close the beach completely.** Lieutenant Lindsay testified in the following manner:

Q: Well, what warnings are there to people like Brad Smith, who's walking with his daughter down the beach, to say that there could come a time where you're going to walk into 10 foot deep water when you're only walking in ankle deep to mid calf water? There's no warning?

A: No. The signs we put up, dangerous currents. But—

Q: But you wouldn't see them if you're walking from a protected beach to where the event took place?

A: No. Nope (emphasis added).

Q: All right. Here's another thing I asked myself. And it's easy for me to ask questions, and it's tough for people to provide answers. I realize that. What do you think, given all your experience on the beach patrol, and especially with this area that we've been talking about, how do we prevent another Brad Smith from drowning?

...

A: Yeah. You know, being a lieutenant down there for so long, and being on a lot of these drownings, you know, I asked myself the same thing. And I think the only way to prevent it is to shut the beach down completely (emphasis added). I mean, fences, you know, guard dogs, 24/7. Not even—not even walking down there. Because there's—you know—

Q: In a perfect world, if—if you were king, where would you shut the beach off,; from what point to what point?

...

Q: What you're saying is you'd have to close the beaches from Moore's Beach to the inlet zone, where it starts?

A: Yes.

Q: Okay.

A: And no one step a foot on—on the sand.

See Lindsay Dep. 45:10- 47:13.

Q:... What would you tell them when you went down there, when they're at the Point, as to why they shouldn't be swimming there?

A: We would tell them that they're in unprotected part of the beach, unguarded part, and that it's not a safe place to swim.

Q: Okay. If somebody was walking at water's edge, would you tell them not to walk there?

A: I couldn't we just didn't have the—because it was—it's pretty—you know being down there yourself, it's a

pretty popular area to walk. A lot of people—a lot of people that are the Moore's Beach will walk this way to get a hot dog, a lot of people that are at the inlet beach will walk that way to see the boats, and Jet Skis, and—so, it—you know, it just wasn't—it wasn't—

Q: Yeah. The Chief touched on that. Not enough manpower, or woman power.

A: Right.

Q: To be politically correct. The—when people would walk from Moore's Beach south, where would they go to get a hot dog?

A: There was a stand—there's a stand at First and Surf, and also one at Second and JFK.

Q: Okay. In a perfect world, if North Wildwood had an unlimited budget, would you, if you were the chief, have lifeguards walking on foot between Moore's Beach and the beginning of the inlet zone to warn people about that even walking in ankle deep water could be dangerous.

A: Not lifeguards. Police.

Q: Who would you—If you would have to have police department. Because you'd have too much of a confrontation with—with the beach patrol.

...

A: Yeah. I mean, you'd have to really, it would be like a military state. You'd have to—you would get a—have such a problem with locals. That's their beach. They—you know, they think, you know.

Q: Um-hum. You know, I'm going to leave this up to you if you want to answer it or not. Mrs. Smith, her sole motive by this litigation is never to let this happen to another family, to lose, you know, a husband, two young—you know, a father to, you know—to two young kids. You don't have to answer if you don't want to.

A: Um hum.

Q: And nobody's blaming you please, think about this whole thing.

A: Oh, I know.

Q: What would you say to her about the future for—to prevent this from happening again?

A: Yeah. You know, it definitely wasn't an easy thing for me. I would tell her I don't know what the answer is. And I sat—I sit on the beach eight hours a day, six days a week. And knowing how dangerous it is down there, trying to do my best. And you know, I know, our response team couldn't have done a better job. There was a Jet Ski on scene.

Q: Yeah.

A: That was right there.

Q: Right, yeah, we know.

...

A: What it is, is you put big fences, electrical fences with guard dogs, and police, and you don't let people in there.

That's—that's what it comes down to.

See Lindsay Dep. 51:8-54:8

53. An extensive amount of depositions were taken in the Law Division companion case, and almost every city official was asked about their personal knowledge of the dangers which are present on the Unprotected Inlet Beach.

54. Former City Administrator Louis Belasco responded in the following manner:

Q: ... Being a resident of North Wildwood, and you're maturing through grammar school and high school and college, were there any dangers to the inlet beach area, and including the inlet that runs adjacent to it, that you became aware of, as someone living there?

...

A: Well, all inlets are inherently dangerous, mostly due to the currents that run through them.

See Belasco Dep. 15:5-15.

55. Attached hereto and made a part hereof as Exhibit "G" is a true and accurate copy of the deposition transcript of Louis Belasco.

56. Carl Delinski, Jr., the Supervisor of Public works in North Wildwood testified in the following manner:

Q: Okay. Now, given your employment with the city over the years, have there been times that the Inlet Beach and Moore's Inlet Beach changes in size?

A: Constantly.

Q: Okay. And why is that?

A: I would guess because of the inlet, itself.

Q: Yeah.

A: The tides that run through the inlet. It's constantly changing. The whole beach, actually, not just there. Even our beach front, the big beach. But that's—from day to day, it could be different when you go down there.

Q: All right. We've taken a lot of depositions, we also took the deposition of Chief Cavalier of the beach patrol, so all of us lawyers know—we've learned a lot about the inlet, Hereford Inlet, and the beaches there. Just given your experience with that inlet, itself, is there something unique about the inlet waters there?

A: The tides are terrible there. I mean it—that's where the water fills the back bay, and empties. So, it rips through there like really bad. I mean (emphasis added).

See Delinksi Dep. 15:3- 16:3.

Q: All right. We took the deposition of Chief Cavalier, who was talking about when the back bays are going into the ocean, that you can literally see—

A: Oh, yeah,

Q: --a vortex?

A: Yes,

Q: All right? He described it for us in pretty good detail. Have you ever seen this vortex?

A: Sure.

Q: Okay. And does it typically occur when the back bays are going into the ocean?

A: I would think, yeah, on the outgoing tides.

Q: Yeah. Outgoing from the bay to the ocean?

A: From the bay into the ocean, yeah.

Q: And is it there every day when the back bays are going into the ocean?

A: I would think in spots, yes.

Q: And what does it look like?

A: Whirlpool. Just a big vortex, like you said. You could actually see the water spinning (emphasis added).

See Delinksi Dep. 16:18 – 17:15.

57. Attached hereto and made a part hereof as Exhibit "H" is a true and accurate copy of the deposition transcript of Carl Delinski, Jr.

58. Chief of the North Wildwood Police Department, Matthew Gallagher, testified in the following manner:

Q: Okay., are you aware of any dangers of what—of the beach that you circled in blue, which was Moore's Beach, on Exhibit 58, of the beach collapsing?

A: I was called down to Moore's beach, I don't know remember the year, where they actually did close off the beach for a little while, because there was—sand was collapsing into the ocean.

Q: Okay. And what year or years was that?

A: I don't recall.

Q: Best estimate?

A: within the last five years.

See Gallagher Dep. 22:21- 23:8.

59. Attached hereto and made a part hereof as Exhibit "I" is a true and accurate copy of the deposition transcript of Matthew Gallagher.

60. Mayor of North Wildwood, Patrick Rosenello was deposed in connection with the companion case on March 10, 2016. He testified as follows:

Q: .. And my question is, before July 2012, did you ever see people wading in the water off of Moore's Beach?

A: Yes.

Q: Okay. Now, were those individuals that you saw in violation of any city ordinances?

A: I don't know.

Q: Okay. When you saw those people wading off the Moore's Beach, before July 2012, did you call the North Wildwood Police Department, or the North Wildwood Beach Patrol?

A: No.

Q: Okay. When you saw those people wading in the water off of Moore's Beach before July 2012, did you think that they were exposing themselves to any hazardous conditions existing in the water that constitutes Hereford Inlet?

A: I believe that if you're not swimming in front of a lifeguard, you are subjecting yourself to a hazardous condition in the ocean.

See Rosenello Dep. 42:14-43:11.

Q:.. have you ever seen any signs on the area that you delineated as the inlet beach, warning anyone about the dangers of walking on—in ankle deep water?

A: No specifically referencing ankle deep water, no.

See Rosenello Dep. 50:23- 51:3.

Q: Okay. Okay. The second sentence I've highlighted says, "There's no gray area. If there's not a lifeguard on duty, you should not be in the ocean," he said. 'It's such a dynamic environment, to say you were only so deep, that's not the issue. There's no room for equivocation.'" Do you stand by that?

A: Yes.

Q: All right. As it relates to the activity of Mr. Smith and his daughter, and Scott Sunderland and his daughter, in walking in ankle deep water, would you say—would you agree with me that this quote that I just referenced does not apply to that activity?

A: I would say that the ocean is a wilderness, and if I were not familiar with the area I'm in, and there was no lifeguards there, I would not advise someone to be—to go into that water.

Q: Even in ankle deep water?

A: Even in ankle deep water.

See Rosenello Dep. 82:6-25.

Q: All right. The next quote, "If you choose to enter the water on an unguarded beach, you do so at great risk to yourself; he said, 'no swimming, swimming, if there's no lifeguards, you should not be wet. It's very simple. So, is it your position, again, in light of their particular statement, that Mr. Smith and his daughter were exposing themselves to hazardous conditions by walking in ankle deep water at a beach that there was no lifeguard?"

A: Again, I think it's incredibly unfortunate what happened to Mr. Smith. I think that people have the mistaken impression that the ocean is similar to their neighborhood pool, and they're not familiar with the currents and tides and things of that nature. And I think, in this context, now, at this time, I'm the mayor of North Wildwood, I'm the Director of Public Safety, I think it's very important for me to very, very clearly take the public position that if there is not a lifeguard, you should not be wet. And I stand by that answer.

See Rosenello Dep. 83:24-84:21.

A: It is my position they were exposing themselves to hazardous conditions? I think—I think the best answer I can give you is that, being interviewed for this newspaper article, as the spokesperson for the City of North Wildwood, an article that's coming out in the middle of the summer, I believe it was my obligation to

make a statement that, do not go in the water at an unguarded beach. That's what—that's the message O was trying to send with that quote. So that—there—and again, I stand by that, that I don't think that there is room for, well, I was ankle deep, I was knee deep, I was thigh deep. You should not enter the ocean unless there is a lifeguard on duty on that beach.

See Rosenello Dep. 85:3-17.

61. Attached hereto and made a part hereof as Exhibit "J" is a true and accurate copy of the deposition transcript of Patrick Rosenello.

62. Mayor Rosenello also described the Hereford Inlet as constantly changing:

Q: All right. This is kind of a follow-up question to something I asked you about 15 minutes ago: Looking at that body of water called the inlet, and given the fact that you started living in North Wildwood at age four. Right? Up until July 27, 2012, the drowning of Mr. Smith, what have you, personally, observed about the inlet, itself, the body of water, relative to the- I'll be a little bit more specific—relative to how the actual channel moves?

A: Right. It changes on an almost daily basis. There are what I call shoals or sand bars that come and go. This large piece of sand you see up here and coming off the bottom of Stone Harbor didn't exist five years ago, and it might not exist tomorrow. The inlet beach that we're talking of didn't exist until probably the late '80s, maybe, mid to late '80s. There was no sand accumulated there. So, it—it—the whole—the whole area changes on a—I say on a daily basis. I still live in an area where I can see the inlet. And literally on a daily basis.

See Rosenello Dep. 29:12-30:7.

63. Mayor Rosenello when asked why he believes that the Unprotected Inlet Beach should remain unprotected, he testified:

A: That area is a large expanse, and it would probably require upwards of 10 additional lifeguard stands, which during the summer would be at least 20 additional lifeguards, plus supervision, which would be a very large increase to the size of our beach patrol. So, it would be from—from a resource standpoint, and a recruitment standpoint of getting qualified guards, that

would be a very large increase in our—in our—in our enforce—in our beach patrol.

Q: Okay. Before July 27, 2012, is it your position, based upon your experience as a governmental official, that North Wildwood simply didn't have the money to put those additional lifeguards posted in the area that you have defined as the inlet beach, which includes Moore's Beach?

A: No. I think the city, if we chose to allocate resources there, we could have—we could certainly afford to put lifeguard stands there (emphasis added). But another—another reason, and I only think of it, because I looked at this, we also want to provide people areas where they can fish, and engage in other things to do not involve lifeguarding. And you can't have guarded—you can't allow people to fish at guarded areas. That's a very popular fishing area, as well. And so, that would be another reason why I would not support that. Because again, we try to accommodate swimmers, surfers, fishermen, a lot of different activities that happen on the beach.

Q: Well—

A: Or the ocean.

See Rosenello Dep. 74:5- 75:12.

64. Mayor Rosenello is of the opinion that the Unprotected Inlet Beach should not be closed to the public. He described his reasoning in the following manner:

A: Exhibit 72 is probably the best depiction. I mean, people fish, they sit, they relax on the beach, they play games on the beach. You know, and I—I think keeping the beaches open to the public is important for---

Q: Okay. If that's being the—if that's the case, just in light of what you testified, why wasn't there a lifeguard on Moore's Beach before July 27, 2012.

A: There's still not a—I'm sorry.

A: We have a—North Wildwood's an island, literally, and we have many areas of tidal areas that aren't guarded by lifeguards. As a matter of fact, if you further west, there's areas where small beaches develop along the sea wall frequently. And we don't guard them all. We have a certain number of designated guarded lifeguard beaches that we guard, and we—it would simply be impossible to place a lifeguard at every place where the public has access to the ocean or bay.

See Rosenello Dep. 69:7-70:4.

65. Surf fishing is permitted on the Unprotected Inlet Beach. In his March 10, 2016, deposition, Mayor of North Wildwood, Mayor Rosenello clarified the North Wildwood Surf Fishing rules as follows:

Q: So, people are permitted to fish in that area?

A: Yes

Q: All right.

A: They're—I'm sorry. People are pretty much permitted to fish anywhere in the city where it's an unguarded beach, including—we have a couple spots down around Second and Kennedy, where we don't guard because of a groin there, and again, people are allowed to fish in that area.

See Rosenello Dep. 75:18-76:2

66. Surf fishing is also promoted by the City of North Wildwood. Stephen DeHorsey, Jr., Assistant Superintendent of Recreation and Director of Tourism for the City of North Wildwood testified that every year there the city holds a surf fishing contest, and one of the permitted beaches for this tournament is the Unprotected Inlet Beach, Mr. DeHorsey testified as follows:

Q: Okay. Could you give me kind of an overview of what the city's involvement was with the surf fishing before July of 2012?

A: The recreation department runs a surf fishing tournament, and then there's actually two surf fishing tournaments that are held in North Wildwood through two other organizations.

Q: Okay. So, let's do the surf fishing tournament that is conducted by the city.

A: The recreation department runs a surf fishing tournament, and then there's actually two surf fishing tournaments that are held in North Wildwood through two other organizations.

Q: Okay. So, let's do the surf fishing tournament that is conducted by the city,

A: By the rec. Okay?

Q: By the recreation?

A: Department, yes.

Q:Of the City of North Wildwood?

A: Yes.

Q:All right. And at what beaches does this surf fishing tournament take place?

A: Our boundaries are 26th Street and the beach, all the way down to—

Q: Moore's Inlet Beach?

A: Past that. There's apartments on the seawall. And there's a fence that goes up, all the way—you can fish all the way up until there.

Q: Okay. And when is the surf fishing tournament typically conducted?

A: The weekend after Labor Day.

Q: Okay. And exactly what does the city do to get this tournament going?

A: We put it in our information, our calendar of events, put posters up, and one or two signs.

See. DeHorsey Dep. 20: 3 – 21:10.

67. Attached hereto and made a part hereof as Exhibit "K" is a true and accurate copy of the deposition transcript of Stephen DeHorsey, Jr.

68. There are a number of publications which discuss the powerful and dangerous conditions of the Hereford Inlet.

69. The former Mayor of North Wildwood, William Henfey, is quoted in the September 26, 2012, issue of the Cape May County Herald as saying: "there's a vortex that's created in our inlet, we have competing inlets coming out of Hereford Inlet and it's causing a whirlpool effect there." See Exhibit "L".

70. Attached hereto and made a part hereof as Exhibit "L" is a true and accurate copy of the above referenced article.

71. There Hereford Inlet Lighthouse information packet states: "...strong currents and shifting sandbars near the entrance to the inlet caused frequent groundings and shipwrecks. Because of this, in 1849, a Life Saving Station was constructed along the sought bank of the Hereford Inlet." See Exhibit "M".

72. Attached hereto and made a part hereof as Exhibit “M” is a true and accurate representation of the above referenced pamphlet.

73. In a December 17, 2013, report the U.S. Army Corps of Engineers stated that, “Tidal currents may cause tangible effects on shore stability and water quality. These are tidal driven water level differences between the ocean and back bay areas. The periodic rise and fall of the ocean water elevation adjacent to barrier islands, creates the ebb and flood cycle of tidal currents. See Exhibit “N” p. 59.

74. Attached hereto and made a part hereof as Exhibit “N” is a true and accurate copy of the above referenced report.

75. Traditionally, the last protected beach in North Wildwood is Surf Avenue. First and Surf Avenue faces the Hereford Inlet. See Rosenello Dep. 49:18-19.

76. Michael C. Maslowski a retired New Jersey State Trooper, and member of the Marine Division of the New Jersey State Police provided a certification dated September 28, 2016.

77. Attached hereto and made a part hereof as Exhibit “O” is the certification of Michael C. Maslowski.

78. In his certification Trooper Maslowski indicates that the Marine Division of the New Jersey State Police has been called in to assist with water rescues of the Unprotected Inlet Beach over the years. See Maslowski Cert. ¶ 7.

79. In addition, the Marine Division of the New Jersey State Police regularly patrols the Hereford Inlet, and the State Troopers are aware of unreported water rescues which are effectuated by civilians. See Maslowski Cert. ¶ 11-13.

80. The State Troopers are aware of the drop off which is present on the Unprotected Inlet Beach and the vortex or whirlpool. See Maslowski Cert. ¶ 15.

81. The lifeguards provide surf wheel chairs for disabled beach goers at this entrance so that handicapped beach goers can access the Hereford Inlet Beach. See Exhibit “P” p. 8.

82. Attached hereto and made a part hereof as Exhibit “P” is a true and accurate copy of the North Wildwood New Jersey 2016 Information & Recreation Guide.

83. Unfortunately, the Smith drowning was not the only drowning which occurred as a result of the drop off on the Unprotected Inlet Beach.

84. On June 30, 2009, after the lifeguards had left for the day and signaled everyone out of the water, three women began to enter the water. See Exhibit “Q”.

85. Attached hereto and made a part hereof as Exhibit “Q” is a true and accurate copy of the North Wildwood Police Department Investigation Report from July 13, 2009, regarding the Hart and Watkins drownings.

86. On August 31, 2016, the survivor of that incident, Domonique McNeil was deposed in connection with this matter’s companion case.

87. Attached hereto and made a part hereof as Exhibit “R” is a true and accurate copy of the deposition transcript of Domonique McNeil.

88. While the women were standing at the water’s edge, the first woman, Domonique McNeil, moved about two feet to the left and fell as a result of the drop off. Ms. McNeil described this feeling as “a false bottom.” See McNeil Dep. 43:7-10

89. Shortly after Ms. McNeil fell into the water, her two relatives, Jamilah Watkins and Shayne Hart were also pulled in while trying to help Ms. McNeil out of the water. See McNeil Dep. 23:3-19

90. Eventually, the three were separated, and Ms. McNeil described the water as feeling, “like a twister, an underwater twister, but at the same time it was like pushing and pulling.” See McNeil Dep. 46:11-15.

91. McNeil went on to explain, “... if I tried to move, I wasn’t going anywhere. Like I was kind of trapped where I was at, and then it was more just waves. Like I don’t know, the water went from zero feet to like bottomless.” See McNeil Dep. 47:3-7.

92. She reached a man on the beach and he called 911. However, the two had lost sight of Ms. Watkins and Ms. Hart. See Exhibit “Q”.

93. The two young women were recovered from the water by emergency personal and transported to the hospital, where they were eventually pronounced dead. See Exhibit “Q”.

94. Additionally, as discussed in Exhibit “D” another woman drowned in July of 2011. Her belongings were found on the Unprotected Inlet Beach.

95. Nevertheless, the City of North Wildwood promotes itself as a safe destination for families. In an article entitled, “Things to do in North Wildwood, NJ,” posted on the USA Today website, it is noted that “Moore’s Inlet is the only beach in the Wildwoods that allows dogs and barbecues. It’s a good spot for fishing and renting personal watercraft.” See Exhibit “S”.

96. Attached hereto and made a part hereof as Exhibit “S” is a true and accurate copy of the above referenced article.

97. J. Richard Weggel, Ph.D, P.E., D.CE., has opined that due to the hazards at the Unprotected Inlet Beach, discussed in his report dated April 19, 2016, compel him to strongly recommend the Unprotected Inlet Beach at Hereford Inlet, North Wildwood, NJ, be closed.

98. Attached hereto and made a part hereof as Exhibit "T" is a true and accurate copy of two Certifications executed by Professor Weggel which include Report, Addendum Report, and Curriculum Vitae, and photographs which Professor Weggel will utilize if asked to testify at a hearing.

99. Professor Weggel stated, "the fact that steep slopes appear on all six surveys [which he reviewed] indicates that the conditions are persistent. See Weggel Addendum.

100. The dangerous slope conditions are below the water line and are not visible to pedestrians walking on the beach, furthermore, they are not generally predictable although they probably occur most frequently during ebb current flows in the inlet." See Weggel Addendum.

101. Dr. Weggel further advised, "I personally would not walk near the water line on the beach and I would advise my friends and loved-ones to stay away from this area." See Weggel Addendum.

102. Dr. Weggel also explained, "I am bound by the Code of Ethics of the American Society of Civil Engineers to hold paramount the safety, health, and welfare of the public. I believe that the city inlet conditions are a threat to public safety." See Weggel Addendum.

103. There are photographs which show the popularity of said beach, which Dr. Weggel opines is a threat to public safety. See Exhibits "U"- "Z".

104. Attached hereto and made a part hereof as Exhibits "U", "V", "W", "X", "Y", and "Z" are the above referenced photographs.

COUNT ONE

1. Plaintiffs repeat the allegations of the previous paragraphs as if same were set forth at length herein.

2. The Defendant City of North Wildwood by and through its agents, agencies, and

employees, is responsible for the maintenance, supervision, management, and control of the Unprotected Inlet Beach.

3. Defendant City of North Wildwood owes the public in general and the Plaintiffs as a member thereof, the duty to maintain, supervise, manage, and control their property so as not to injure the public's right to maintain public health, public safety, and public peace.

4. Defendant City of North Wildwood owes the public the duty to maintain, supervise, manage, and control their property so as not to jeopardize or injure the public's comfort, or the public convenience.

5. Defendant City of North Wildwood intentionally and recklessly markets and promotes the beach as a safe destination for beach goers to media, on their website, and in the North Wildwood New Jersey Information and Recreation Guide. Specifically, this information refers to the Hereford Inlet Beach from Surf Avenue north until the end of the beach (hereinafter "Unprotected Inlet Beach"). As such Defendant North Wildwood intends for beachgoers to frequent the beach in this location. However Defendant fails to guard the Unprotected Inlet Beach or adequately warn of the dangers associated with the Unprotected Inlet Beach.

6. For over ten years Defendant City of North Wildwood was aware of the life threatening hazard presented by the dangerous conditions created by a drop off that was often two feet from the shoreline at the Unprotected Inlet Beach, coupled with strong currents in the Hereford Inlet and a vortex and/or whirlpool in the Hereford Inlet.

7. Defendant the City of North Wildwood's conduct in maintaining, supervising, managing and controlling the Unprotected Inlet Beach causes beachgoers to swim, stand, and walk in ankle deep water.

8. When beachgoers take part in these activities they are exposed to the risk that they may be suddenly dropped in the ocean over their heads, and be pulled by the current and/or

vortex and/or the whirlpool out to sea and injured or killed by conditions that are present in the Hereford Inlet.

9. Moreover, there is no way for a casual beach user or tourist to know or appreciate that there is a real and certain substantial potential of injury and/or death to beach goers.

10. On July 27, 2012, Plaintiff, Brad Smith was unaware of the dangerous conditions created by the drop off and the currents and/or vortex and/or whirlpool when he was walking in ankle deep water with his seven year old daughter.

11. Defendant City of North Wildwood's conduct constitutes a nuisance as hundreds of beachgoers walk along the water's edge on this particular Unguarded Inlet Beach every day in the summer months. These people are unknowingly in constant danger of taking a wrong step and being swept into a vortex that can suck them under the water and drown them.

12. Defendant the City of North Wildwood knows that its actions and inactions interfere with the citizens and beachgoers of North Wildwood's public health, safety, and welfare and the public's right to be free from unnecessary danger.

13. Defendant City of North Wildwood's conduct is a direct and proximate cause of Brad Smith's death, as well as an unreasonable interference with the safety, health, and welfare of the citizens and beachgoers of North Wildwood's right to be free from danger.

14. Defendant City of North Wildwood's conduct, if not stopped, will continue to pose an interference to the health, safety, and welfare of the citizens and beachgoers of North Wildwood.

COUNT TWO

1. Plaintiffs repeat the allegations of the previous paragraphs as if same were set forth at length herein.

2. The Defendant State of New Jersey owns the Unprotected Inlet Beach area

where Brad Smith, Brandy Smith, Scott Sunderland, and his two young children were walking.

3. The Defendant City of North Wildwood by and through its agents, agencies, and employees, is responsible for the maintenance, supervision, management, and control of the Unprotected Inlet Beach.

4. Defendant State of New Jersey owes the public in general and the Plaintiffs as a member thereof, the duty to maintain, supervise, manage, and control their property so as not to injure the public's right to maintain public health, public safety, and public peace.

5. Defendant State of New Jersey owes the public the duty to maintain, supervise, manage, and control their property so as not to jeopardize or injure the public's comfort, or the public convenience.

6. Defendant State of New Jersey was aware of dangerous conditions created by a drop off that was present on the Unprotected Inlet Beach, as well as strong currents in the Hereford Inlet and a vortex and/or whirlpool in the Hereford Inlet.

7. Defendant the State of New Jersey's conduct in maintaining, supervising, managing and controlling the Unprotected Inlet Beach causes beachgoers to swim, stand, and walk in ankle deep water.

8. When beachgoers are exposed to a risk that they will be pulled into the current and/or the vortex and/or the whirlpool and conditions that are present in the Hereford Inlet.

9. There is a real and certain substantial potential of injury and/or death to beach goers.

10. On July 27, 2012, Plaintiff, Brad Smith was unaware of the dangerous conditions created by the drop off and the currents and/or vortex and/or whirlpool when he was walking in ankle deep water with his seven year old daughter.

11. Defendant State of New Jersey's conduct constitutes a nuisance as hundreds of

beachgoers walk along the water's edge on this particular Unguarded Inlet Beach every day in the summer months. These people are unknowingly in constant danger of taking a wrong step and being swept into a vortex that can suck them under the water and drown them.

12. Defendant State of New Jersey knows that its actions and inactions interfere with the citizens and beachgoers of North Wildwood's public health, safety, and welfare and the public's right to be free from unnecessary danger.

13. Defendant State of New Jersey's conduct is a direct and proximate cause of Brad Smith's death, as well as an unreasonable interference with the safety, health, and welfare of the citizens and beachgoers of North Wildwood's right to be free from danger.

14. Defendant State of New Jersey's conduct, if not stopped, will continue to pose an interference to the health, safety, and welfare of the citizens and beachgoers of North Wildwood.

PRAYER FOR RELIEF

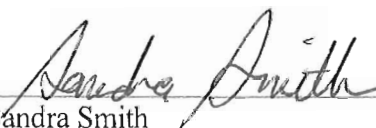
WHEREFORE, Plaintiff respectfully seeks judgment in its favor against Defendant as follows:

- (a) Defendants be immediately and permanently enjoined from allowing access to the Unprotected Inlet Beaches, reaching north of First Avenue and Surf Avenue until the Spruce Avenue and the Beach at the Sea Wall.

VERIFICATIONS OF SANDRA SMITH

I, Sandra Smith, of full age, hereby certify as follows:

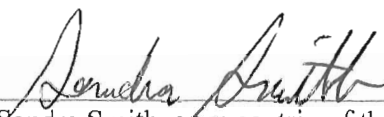
1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on my behalf.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.


Sandra Smith

DATED: 10/4/14

I, Sandra Smith, as Executrix of the Estate of George Bradley Smith, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on behalf of the Estate of George Bradley Smith.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.


Sandra Smith, as executrix of the Estate
of George Bradley Smith

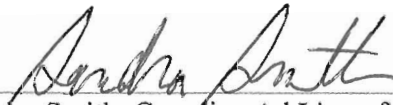
DATED: 10/4/14

I, Sandra Smith, as Guardian Ad Litem for my children, Kole and Brandy Smith, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on behalf of my children Kole and Brandy Smith.

2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.

3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Sandra Smith, Guardian Ad Litem for
my Children Kole and Brandy Smith

DATED: 10/4/16

VERIFICATIONS OF NICOLE GAETA AND KYLE SMITH

I, Nicole Gaeta, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on my behalf.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

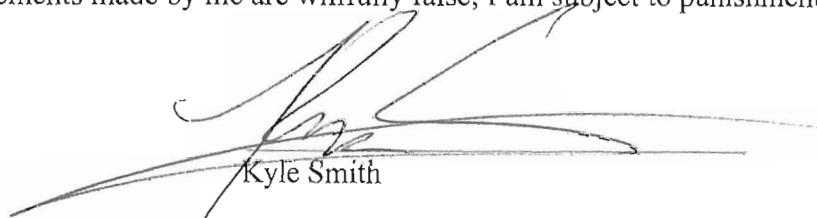


Nicole Gaeta

DATED: 10/4/16

I, Kyle Smith, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on my behalf.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Kyle Smith

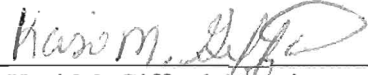
DATED: 10/4/16

NOTICE OF TRIAL COUNSEL

Paul R. D'Amato, Esquire is designated as Trial Counsel pursuant to Rule 4:25-4.

D'AMATO LAW FIRM

BY: 
Paul R. D'Amato, Esquire


Kasi M. Gifford, Esquire

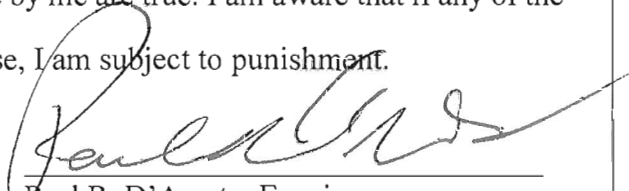
DATED 10/4/16

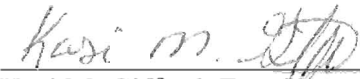
CERTIFICATION

Paul R. D'Amato, Esquire, of full age, certifies:

1. I am a member of the D'AMATO LAW FIRM and am entrusted with the preparation and trial of this case.
2. This case is the subject of a civil action captioned Smith v. City of North Wildwood, et als. Docket Number CPM-L-331-14 and CPM-L-324-16.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Paul R. D'Amato, Esquire


Kasi M. Gifford, Esquire

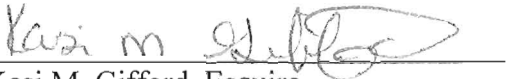
DATED 10/4/16

CERTIFICATION OF COMPLIANCE WITH RULE 1:38-7(c)

I, Paul R. D'Amato, Esquire, certify that confidential personal identifiers have been redacted from documents now submitted to the court, and will be redacted from all documents submitted in the future in accordance with Rule 1:38-7(b).



Paul R. D'Amato, Esquire

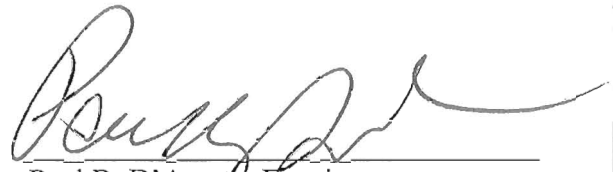


Kasi M. Gifford, Esquire

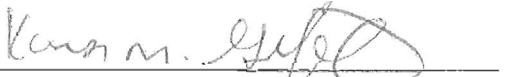
DATED: 10/4/14

GUARDIAN AD LITEM CERTIFICATION

I hereby certify that Plaintiff Sandra Smith as parent and guardian ad litem for her minor children Brandy and Kole Smith that does not have any interest contrary to that of the minors, and has consented to act as the Guardian Ad Litem.



Paul R. D'Amato, Esquire

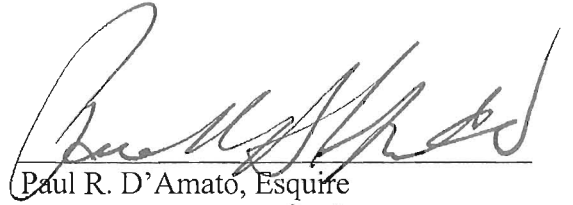


Kasi M. Gifford, Esquire

DATED: 10/4/16

NOTICE OF OTHER ACTIONS

Pursuant to Rule 4:5-1, the plaintiffs' attorneys hereby certify that there are two other cases pending in which the matter in controversy is the subject. These cases are docketed under CPM-L-331-14 and CPM-L-324-16.



Paul R. D'Amato, Esquire



Kasi M. Gifford, Esquire

DATED: 10/4/16

D
D'AMATO
LAW FIRM

COUNSELORS AT LAW
A PROFESSIONAL CORPORATION

2900 Fire Road
Suite 200
Egg Harbor Township, NJ 08234

CIVIL CASE INFORMATION STATEMENT (CIS) Use for initial Law Division – Civil Part pleadings (not motions) under Rule 4:5-1. Pleadings will be rejected for filing, under Rule 1:5-6(c), if information above the black bar is not completed or if attorney's signature is not affixed.		FOR USE BY CLERK'S OFFICE ONLY	
		PAYMENT TYPE: CK CG CA	
		CHG / CK NO.	
		AMOUNT:	
		OVERPAYMENT:	
BATCH NUMBER:			
ATTORNEY / PRO SE NAME Paul R. D'Amato	TELEPHONE NUMBER (609) 926-3300	COUNTY OF VENUE CAPE MAY	
FIRM NAME (If applicable) D'Amato Law Firm, P.C.		DOCKET NUMBER (When available)	
OFFICE ADDRESS 2900 Fire Road, Suite 200 Egg Harbor Township, New Jersey 08234		DOCUMENT TYPE VERIFIED COMPLAINT	
		JURY DEMAND [] YES [X] NO	
NAME OF PARTY (e.g. John Doe, Plaintiff) Sandra Smith, individually and as Executrix Estate of George Bradley Smith and as GAL for Children Kole Smith and Brandy Smith, and Nicole Gaeta, Kyle Smith, Plaintiffs		CAPTION Sandra Smith, indiv. and as Executrix Estate of George Bradley Smith and as GAL for Children Kole Smith and Brandy Smith, and Nicole Gaeta, Kyle Smith vs. City of No. Wildwood, State of NJ	
CASE TYPE NUMBER (See reverse side for listing) 801	HURRICANE SANDY RELATED? [] YES [X] NO	IS THIS A PROFESSIONAL MALPRACTICE CASE [] YES [X] NO IF YOU HAVE CHECKED "YES," SEE N.J.S.A. 2A:53A-27 AND APPLICABLE CASE LAW REGARDING YOUR OBLIGATION TO FILE AN AFFIDAVIT OF MERIT.	
RELATED CASES PENDING [X] YES [] NO	IF YES, LIST DOCKET NUMBERS: CPM-L-331-14 and CPM-L-324-16		
DO YOU ANTICIPATE ADDING ANY PARTIES (arising out of same transaction or occurrence) [] YES [X] NO	NAME OF DEFENDANT'S PRIMARY INSURANCE COMPANY, IF KNOWN [] NONE [] UNKNOWN		
THE INFORMATION PROVIDED ON THIS FORM CANNOT BE INTRODUCED INTO EVIDENCE.			
CASE CHARACTERISTICS FOR PURPOSES OF DETERMINING IF CASE IS APPROPRIATE FOR MEDIATION			
DO PARTIES HAVE A CURRENT, PAST OR RECURRENT RELATIONSHIP? [] YES [X] NO	IF YES, IS THIS RELATIONSHIP [] EMPLOYER - EMPLOYEE [] FRIEND / NEIGHBOR [] FAMILIAL [] BUSINESS [] OTHER (explain):		
DOES THE STATUTE GOVERNING THIS CASE PROVIDE FOR PAYMENT OF FEES BY THE LOSING PARTY? [] YES [X] NO			
USE THIS SPACE TO ALERT THE COURT TO ANY SPECIAL CASE CHARACTERISTICS THAT MAY WARRANT INDIVIDUAL MANAGEMENT OR ACCELERATED DISPOSITION: Pending Law Division action under Docket Number CPM-L-331-14 and CPM-L-324-16			
DO YOU OR YOUR CLIENT NEED ANY DISABILITY ACCOMMODATIONS? [] YES [X] NO IF YES, PLEASE IDENTIFY THE REQUESTED ACCOMMODATION:			
WILL AN INTERPRETER BE NEEDED? [] YES [X] NO IF YES, FOR WHAT LANGUAGE:			
I certify that confidential personal identifiers have been redacted from documents now submitted to the court, and will be redacted from all documents submitted in the future in accordance with Rule 1:38-7(b).			
ATTORNEY SIGNATURE 			

CIVIL CASE INFORMATION STATEMENT

(CIS)

Use for initial pleadings (not motions) under *Rule 4:5-1*

CASE TYPES (Choose one and enter number of case type in appropriate space on the reverse side.)

Track I - 150 days' discovery

- 151 NAME CHANGE
- 175 FORFEITURE
- 302 TENANCY
- 99 REAL PROPERTY (other than Tenancy, Contract, Condemnation, Complex Commercial or Construction)
- 502 BOOK ACCOUNT (debt collection matters only) 505 OTHER INSURANCE CLAIM (including declaratory judgment actions)
- 506 PIP COVERAGE
- 510 UM or UIM CLAIM (coverage issues only)
- 511 ACTION ON NEGOTIABLE INSTRUMENT
- 512 LEMON LAW
- 801 SUMMARY ACTION
- 802 OPEN PUBLIC RECORDS ACT (summary action)
- 999 OTHER (briefly describe nature of action)

Track II - 300 days' discovery

- 305 CONSTRUCTION
- 509 EMPLOYMENT (other than CEPA or LAD)
- 599 CONTRACT/COMMERCIAL TRANSACTION
- 603N AUTO NEGLIGENCE -- PERSONAL INJURY (non-verbal threshold)
- 603Y AUTO NEGLIGENCE -- PERSONAL INJURY (verbal threshold)
- 605 PERSONAL INJURY
- 610 AUTO NEGLIGENCE -- PROPERTY DAMAGE
- 621 UM or UIM CLAIM (includes bodily injury)
- 699 TORT -- OTHER

Track III - 450 days' discovery

- 005 CIVIL RIGHTS
- 301 CONDEMNATION
- 602 ASSAULT AND BATTERY
- 604 MEDICAL MALPRACTICE
- 606 PRODUCT LIABILITY
- 607 PROFESSIONAL MALPRACTICE
- 608 TOXIC TORT
- 609 DEFAMATION
- 616 WHISTLEBLOWER /CONSCIENTIOUS EMPLOYEE PROTECTION ACT (CEPA) CASES
- 617 INVERSE CONDEMNATION
- 618 LAW AGAINST DISCRIMINATION (LAD) CASES

Track IV - Active Case Management by Individual Judge / 450 days' discovery

- 156 ENVIRONMENTAL/ENVIRONMENTAL COVERAGE LITIGATION
- 303 MT. LAUREL
- 508 COMPLEX COMMERCIAL
- 513 COMPLEX CONSTRUCTION
- 514 INSURANCE FRAUD
- 620 FALSE CLAIMS ACT
- 701 ACTIONS IN LIEU OF PREROGATIVE WRITS

Multicounty Litigation (Track IV)

- | | |
|--|--|
| 271 ACCUTANE/ISOTRETINOIN | 290 POMPTON LAKES ENVIRONMENTAL LITIGATION |
| 274 RISPERDAL/SEROQUEL/ZYPREXA | 291 PELVIC MESH/GYNECARE |
| 278 ZOMETA/ARDIA | 292 PELVIC MESH/BARD |
| 279 GADOLINIUM | 293 DEPUY ASR HIP IMPLANT LITIGATION |
| 281 BRISTOL-MYERS SQUIBB ENVIRONMENTAL | 295 ALLODERM REGENERATIVE TISSUE MATRIX |
| 282 FOSAMAX | 296 STRYKER REJUVENATE/ABG II MDULAR HIP STEM COMPONENTS |
| 285 STRYKER TRIDENT HIP IMPLANTS | 297 MIRENA CONTRACEPTIVE DEVICE |
| 286 LEVAQUIN | 299 OLMESARTAN MEDOXOMIL MEDICATIONS/BENICAR |
| 287 YAZ/YASMIN/OCELLA | 300 TALC-BASED BODY POWDERS |
| 288 PRUDENTIALTORT LITIGATION | 601 ASBESTOS |
| 289 RGLAN | 628 PROPECIA |

If you believe this case requires a track other than that provided above, please indicate the reason on Side 1, in the space under "Case Characteristics."

Please check off each applicable category:

Putative Class Action

Title 59

D'AMATO LAW FIRM, P.C.

By: Paul R. D'Amato, Esquire - NJ ID# 006901974

Kasi M. Gifford, Esquire - NJ ID# 152582015

2900 Fire Road, Suite 200

Egg Harbor Township, New Jersey 08234

609-926-3300

Attorney for Plaintiff

SANDRA SMITH, INDIVIDUALLY AND AS EXECUTRIX OF THE ESTATE OF GEORGE BRADLEY SMITH, AND AS GUARDIAN AD LITEM FOR HER CHILDREN KOLE SMITH AND BRANDY SMITH, NICOLE GAETA, KYLE SMITH;

Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

SUPERIOR COURT OF NEW JERSEY
CAPE MAY COUNTY - LAW DIVISION

DOCKET NO.

Civil Action

PLAINTIFFS' MEMORANDUM OF LAW IN SUPPORT OF PLAINTIFF'S APPLICATION FOR AN ORDER TO SHOW CAUSE

PRELIMINARY STATEMENT

Plaintiffs, Sandra Smith, individually and as executrix of the estate of her late husband George Bradley Smith (hereinafter "Brad Smith"), and as Guardian Ad Litem for Her Children Kole Smith and Brandy Smith, and Nicole Gaeta and Kyle Smith, the adult children of Brad Smith bring this application for an Order to Show Cause. Plaintiffs' application requires the Court to determine if the relief requested should be granted in accordance with R. 4:67. Plaintiffs respectfully submit that the conditions present at the Unprotected Inlet Beach in North Wildwood, New Jersey, constitute a Public Nuisance which has caused Plaintiffs to endure a special injury; namely, the loss of a husband, the loss of a father, the loss of a best friend, and the infliction of severe emotional stress for Brandy Smith. Plaintiffs are seeking to have the City of North Wildwood and the State of New Jersey immediately and permanently be enjoined from allowing public access to the

Unprotected Inlet Beaches, reaching north of 1st Avenue and Surf Avenue until the end of the beach to Surf Avenue.

LEGAL ARGUMENT

I. PLAINTIFFS HAVE STANDING TO BRING THE WITHIN ACTION

Plaintiffs have standing to bring the within action to enjoin the City of North Wildwood and the State of New Jersey from allowing public access on the Unprotected Inlet Beach because the state of New Jersey applies standing requirements liberally and Sandra Smith and Brad Smith, as well as their children and Brad Smith's adult children, have a sufficient stake and real adverseness with respect to the subject matter of this litigation. Additionally, the Unprotected Inlet Beach constitutes a public nuisance and Plaintiffs are entitled to bring an action to enjoin or abate this public nuisance because they have suffered a special injury in that Brad Smith was caused to lose his life as a result of this public nuisance.

With regard to Plaintiffs' standing to bring a public nuisance action, there has been a distinction between public and private rights of action arising from public nuisance. These distinctions are explained in Section 821C of the Restatement (Second) as follows:

Who Can Recover for Public Nuisance

(1) In order to recover damages in an individual action for a public nuisance, one must have suffered harm of a kind different from that suffered by other members of the public exercising the right common to the general public that was the subject of interference. In re Lead Paint Litigation, 191 N.J. 405, 425 (2007).

Generally, standing "refers to the plaintiff's ability or entitlement to maintain an action before the court." New Jersey Citizen Action v. Riveria Motel Corp., 296 N.J. Super. 402, 409 (App. Div.). Certif. granted, 152 N.J. 13 (1997), and appeal dismissed as moot,

152 N.J. 361 (1998). Additionally, the Supreme Court has held that “entitlement to sue requires a sufficient stake and real adverseness with respect to the subject matter of the litigation.” Crescent Park Tenants Ass’n v. Realty Equities Corp., 58 N.J.98,107 (1971). Such a sufficient stake and real adverseness has been described as, “a substantial likelihood of some harm visited upon the plaintiff in the event of an unfavorable decision is needed for the purposes of standing.” Home Builders League of South Jersey, Inc. v. Berlin Twp., 81 N.J. 127,134-35 (1979). In re Adoption of Baby T, 160 N.J.332,340 (1999). Additionally, “our courts have deemed "the threshold for standing to be fairly low." Reaves v. Egg Harbor Township, 277 N.J. Super. 360, 366 (Ch.Div.1994); see also Triffin v. Somerset Valley Bank, 343 N.J. Super. 73, 81 (App.Div.2001) (same). Furthermore, “standing "involves a threshold determination which governs the ability of a party to initiate and maintain an action before the court." Triffin, supra, 343 N.J. Super. at 80, (citing In re Adoption of Baby T, 160 N.J. 332, 340, 734 A.2d 304 (1999)). James v. Arms Technology, Inc., 359 N.J. Super. 291, 320-21 (App.Div. 2003)

The Supreme Court in Home Builders League v. Berlin, opined that, “plaintiffs must show both a sufficient stake in the outcome of the proceedings and that their position is adverse to that of defendants.” 81 N.J. 127, 132 (1979). The Court conceded, “these prerequisites are inherently fluid and "in cases involving substantial public interest * * * 'but slight private interest, added to and harmonizing with the public interest' is sufficient to give standing." Elizabeth Federal Savings & Loan Ass'n v. Howell, 24 N.J. 488, 499 (1957). See also In re Quinlan, 70 N.J. 10, 34-35, cert. den. 429 U.S. 922 (1976). Ibid.

The Supreme Court in Crescent Park Tenants Asso. v. Realty Equities Corp., cited to their earlier opinion in Al Walker, Inc. v. Stanhope, 23 N.J. 657, 661 (1957), the Court noted, that the Stanhope case:

well illustrates the foregoing and New Jersey's broad treatment of the standing issue. There the Borough of Stanhope adopted an ordinance which restricted the use of trailers within its borders. The plaintiff was a retail seller of trailer homes with a place of business in Roxbury Township, about four miles from Stanhope. Alleging that he was harmed by the ordinance, he brought an action to have it declared illegal but his action was dismissed in the trial court for lack of standing. This Court reinstated the action in an opinion which noted that in determining a plaintiff's standing "the court is properly required to balance conflicting considerations and weigh questions of remoteness and degree." 58 N.J. 98, 107-08 (1971).

Here, Brad Smith suffered a harm of a kind much different than that suffered by other members of the public exercising the right common to the general public that was the subject of this interference. Brad Smith suffered the ultimate harm: Brad Smith lost his life. Sandra Smith lost her husband, their two children along with Brad's two older children lost their father. A person walking at the water's edge in ankle deep water would not typically expect to suffer any type of harm. A walk at the water's edge on a beautiful beach day seems like a fairly innocent and safe pass time, that millions of people take part in all over the world every day. More specifically, thousands of beachgoers take part in this activity on a daily basis during the summer months along the water's edge in the City of North Wildwood, New Jersey. A reasonably prudent person may expect that a reasonably foreseeable risk of simply walking in ankle deep water at the water's edge would be that one may step on a sharp shell, get bit by a crab, or get stung by a jelly fish. No one expects is that they will fall off a drop off at the water's edge, into water over their

head, in which a vortex or whirlpool is spinning them around and pulling them under the water. That is exactly what takes place off the Unprotected Inlet Beach in North Wildwood's Hereford Inlet section. The scenic beaches are made more inviting by a public parking lot and city built sea wall where visitors can take in the scenic views, which invite them to join the crowds of sunbathers enjoying all that the beach and its unprotected water ways have to offer.

However, hidden at the water's edge is a public nuisance created by the unique tides that eat away at the beach every time the tide retreats. Due to the whirlpool or vortex like phenomena which takes place, there is a drop off into much deeper water within only a couple feet of the low tide mark. Therefore, a person just walking at the water's edge in ankle deep water, such as Brad Smith and his companions, is in constant danger of essentially falling off a cliff into deep water and strong currents.

Conditions such as these have contributed to at least three fatalities in the past, and remain a constant danger to the general public on a daily basis, especially since North Wildwood and the State of New Jersey do little to warn of the dangers of walking at the water's edge in ankle deep water on this specific stretch of beach and the Unprotected Inlet Beaches are promoted as a prime destination for locals and tourist alike. Brad Smith lost his life as a result of this public nuisance, and for that reason Plaintiffs must exercise their right to have this public nuisance abated so that no one else in the public has to suffer the same ultimate harm, a harm of a kind different from that suffered by other members of the general public when walking at the water's edge on a beautiful beach day.

Furthermore, Plaintiffs possess standing in the instant action due to the fact that they have a sufficient stake and real adverseness with respect to the subject matter of the litigation. As previously mentioned the Appellate Division has clarified that, “only a substantial likelihood of some harm visited upon the plaintiff in the event of an unfavorable decision is needed for the purposes of standing.” Jen. ELEC., Inc. v. County of Essex, 197 N.J. 627,646. (2009). Additionally, the Court conceded that, “these prerequisites are inherently fluid and, ‘in cases involving substantial public interest*** “but slight private interest, added to and harmonizing with the public interest” is sufficient to give standing” Elizabeth Federal Savings & Loan Ass’n v. Howell, 24 N.J. 488,499(1957).

Here, the risk of future harm to the Plaintiffs is admittedly minor, if for no other reason than Brad Smith has already passed away, and Sandra Smith and their children are now well aware of the dangerous conditions at the water’s edge on the Unprotected Inlet Beach. However, the Plaintiffs’ private interests in making sure that the public’s safety is maintained and this beach is permanently shut down so that no other family has to lose a loved one in such a tragic way is substantially harmonized with the public interest that is present within this case. Therefore, Plaintiffs have standing.

There is a strong public interest in this case to have the City of North Wildwood and the State of New Jersey publically acknowledge a deadly risk that is present on the beaches that they promote as safe every summer. This beach must be permanently closed. Not only is the Unprotected Inlet Beach inherently dangerous due to the currents and tides that come in and out of the inlet twice a day,

but these currents and tides have eaten away at the beach in a way that makes the water's edge of the Unprotected Inlet Beach a death trap. On Any given day, more so in the summer, a person, or, multiple people could be standing in ankle deep water at the water's edge and one wrong step could lead to them encountering a drop off, being in water up over their heads, in currents that would be dangerous for even an experienced swimmer. The public interest supports permanently closing the Unprotect Inlet Beach to the public. As such Plaintiffs' private interest of having the City of North Wildwood and the State of New Jersey acknowledge the dangerous conditions and shut the beach down so that no one else loses their life are in perfect harmony with the public interest. Furthermore, the Unprotected Inlet Beach becoming permanently closed to the public is substantially adverse to the City of North Wildwood and the State of New Jersey's Interest.

Plaintiffs' have suffered a special injury in this case, therefore, they are able to establish standing to bring the within action for injunctive relief to have the Unprotected Inlet Beach in North Wildwood permanently closed to the public.

II. The Conditions Present on the Unprotected Inlet Beach Constitute a Public Nuisance Because the Dangerous Conditions Unreasonably Interfere with the General Public's Right to Public Health, the Public Safety, and Public Peace, and These Dangerous Conditions are ongoing and permanent in nature.

The strong currents, drop off, and vortex or whirlpool phenomena off of the Unprotected Inlet Beach constitute a public nuisance because these conditions create an unreasonable interference with the general public's right to public health, public safety, and public peace, and these dangerous conditions are ongoing and

permanent in nature. The Restatement (Second) of Torts defines a public nuisance as follows:

- (1) A public nuisance is an unreasonable interference with a right common to the general public.
 - (2) Circumstances that may sustain a holding that an interference with a public right is unreasonable include the following:
 - a. Whether the conduct involves a significant interference with the public health, the public safety, the public peace, the public comfort or the public convenience, or
 - b. Whether the conduct is proscribed by a statute, ordinance or administrative regulation, or
 - c. Whether the conduct is of a continuing nature or has produced a permanent or long-lasting effect, and, as the actor knows or has reason to know, has a significant effect upon the public right.
- In re Lead Paint Litigation, 191 N.J. 405, 425. (2007).

“The right with which the actor has interfered must be common to all members of the general public, rather than a right merely enjoyed by a number, even a large number of people.” Ibid. A public right is collective in nature. Id. at 426. For instance, the Court explained that, if a stream were contaminated and the contamination prevents the use of a public beach or kills the fish in the stream and so deprives all members of the community of the right to fish or safely sunbath, it becomes a nuisance. Ibid.

Additionally, in James v. Arms Technology, Inc., the Court noted that, “Unlike a private nuisance, a public nuisance does not necessarily involve interference with use and enjoyment of land.” 359 N.J. Super. 291, 329. For example, the Court notes that, “there are those activities that are a public nuisance because the defendant is engaged in a continuing course of conduct that is calculated to result in physical harm or economic loss to so many persons as to become a matter of serious concern.” Ibid. In James, the Court agreed that a public nuisance may exist if the conduct complained of involves a significant interference with the public welfare...” Id. at 330.

“The defendant is held liable for a public nuisance if his interference with the public right was intentional or was unintentional and otherwise actionable under the principles controlling liability for negligent or reckless conduct or for abnormally dangerous activities.” Ibid.

In Gilmour v. Green Village Fire Dept., Inc., the Chancery Division granted injunctive relief to a private plaintiff based on the common law doctrine of Public Nuisance. Plaintiff complained that lights on a nearby recreational field, as well as loud noises emanating from the spectators who assembled to witness the games, kept himself and his family up at night. Plaintiff contended that as a result of the offensive noises which occurred during the playing of the games they became nervous and irritable from lack of sleep due to such noises and the illumination from the arc lights which shown into their house. 2 N.J. Super. 393,395.

Here, each of the conditions encountered on the Unprotected Inlet Beach as well as in the Hereford Inlet can be calculated to possibly result in physical harm to the thousands of people who frequent this area on a daily basis. However, the drop off or shelf which is present at the water’s edge on the Unprotected Inlet Beach at mid to low tide is the pivotal factor in escalating the area from a generally dangerous inlet or waterway to a public nuisance. That is because, without this condition people may enter the inlet knowingly or purposely causing them to struggle with the strong currents which are generally present in Inlets. However, because of the hidden drop off which is located in ankle deep water at the water’s edge during mid to low tide, any beach goer from an infant to an elderly person could be unknowingly take just one step in the wrong direction while simply walking at the water’s edge, and be swept into the dangerous inlet with its strong currents and vortex or whirlpool like phenomena.

The existence of this submerged drop off coupled with the already dangerous conditions of the Hereford Inlet is sufficiently calculated to result in physical harm to any person who steps foot on the Unprotected Inlet Beach as to become a matter of serious concern. Much like a contaminated water way would prevent beach goers from using the associated beach front or fishermen from fishing in that waterway, the drop off paired with the dangerous conditions of the Hereford Inlet deprives the members of the North Wildwood community of their right to safely use the beach. If lack of sleep was sufficient under common law to satisfy a private claim for public nuisance, it follows that Brad Smith's death, as well as the death of two other women due to the drop off and inlet conditions are sufficient to constitute a public nuisance under the Restatement (Second). Additionally, both the Chief and a Lieutenant of the North Wildwood Beach Patrol acknowledged that the dangerous conditions were discussed on a daily basis amongst the lifeguards, and in their personal experience the drop off had necessitated the need for numerous other rescues over the years.

As previously asserted, this public nuisance is continuous and ongoing and poses such a danger to the general public as to cause alarm. Chief Cavalier admitted he has been aware of the drop off for at least ten years. Additionally, the Hereford Inlet Light House Pamphlet makes it clear that the strong currents have been present since the Inlet's inception. Moreover, J. Richard Weggel, Ph.D., P.E., D.CE, has opined that he must strongly recommend that the Unprotected Inlet Beach at Hereford Inlet, North Wild, NJ, must be closed. Dr. Weggel came to this conclusion predominately because the conditions are *persistent*, the conditions are below the water line and are not visible, and the conditions are not generally predictable. Lastly, Dr. Weggel maintained that he believes the inlet conditions are a threat to public safety.

The strong currents, drop off, and vortex or whirlpool phenomena which are present off of the Unprotected Inlet Beach constitute a public nuisance because these conditions create an unreasonable interference with the general public's right to public health, public safety, and public peace, additionally the conditions are continuous and ongoing and warrant alarm. Therefore, the Unprotected Inlet Beach must be closed to the public.

III. The City of North Wildwood and the State of New Jersey Know and Have Reason to Know of the Dangerous Conditions Present on the Unprotected Inlet Beach as Established by the Deposition Testimony of Government Officials

The City of North Wildwood and the State of New Jersey know and have reason to know of the dangerous conditions present on the Unprotected Inlet Beach as evidenced by the prior testimony of multiple government officials. As previously noted in James, the Court states that, "a public nuisance may exist if the conduct complained of involves a significant interference with the public welfare or is of a continuing nature or has produced a permanent or long-lasting effect, and, as the actor knows or has reason to know, has a significant effect upon the public right." 359 N.J. Super. 201, 330.

Chief of the North Wildwood Beach Patrol, Tony Cavalier stated in his deposition that about twelve years ago the issue of placing a lifeguard on the Unprotected Inlet Beach was raised, however, when Chief Cavalier and the former North Wildwood Mayor walked on the beach and informally poled the residents of North Wildwood, approximately ninety percent were against the idea, because "they wanted to be able to do what they want." Therefore, a lifeguard was not placed on the unprotected inlet beach.

Additionally, Chief Cavalier testified that at certain times of day, when the tide is changing, there is a drop off along that section of the beach, where it "literally drops off."

Chief Cavalier noted that the drop off moves from season to season within a tenth of a mile, but it is always there. Chief Cavalier admitted that there are no signs warning of said drop off, nor are there signs that warn of any danger of simply walking at the water's edge. Chief Cavalier pointed out that the drop off is not visible, as it is hidden by water at low tide, when it falls right at the water's edge. The drop off stretches about ten to fifteen yards. Chief Cavalier is of the opinion that if someone were to encounter the drop off, the water would be over their head. Chief Cavalier testified that he has been aware of the drop off for at least ten years. Additionally, Chief Cavalier testified that the other lifeguards are aware of the drop off and that all of the lifeguards discuss the drop off and the risk associated with the drop off amongst themselves. At his deposition Chief Cavalier he could venture a guess at what happened to Brad Smith due to some of the rescues that had taken place in the past and his personal experience and knowledge of the drop off.

Furthermore, Chief Cavalier testified that every time the back bay moves out to the ocean a visible "vortex or whirlpool" is created. This was a "vortex or whirlpool" that in Chief Cavalier's opinion an average swimmer would not be able to swim through.

Lieutenant Lindsay of the North Wildwood Beach Patrol also testified that he was aware of the dangerous created at the Unprotected Inlet Beach. Lieutenant Lindsay testified that he used to listen to the police radio in anticipation of a drowning incident on the Unprotected Inlet Beach. Lieutenant Lindsay was aware of the strong currents and world pool/vortex like phenomena and the drop off. In Lieutenant Lindsay's opinion the only way to prevent future drownings on the Unprotected Inlet Beach is to permanently close the beach.

Various other city officials were aware of the dangerous conditions present on the Unprotected Inlet Beach as the former Mayor commented publicly about the

vortex/whirlpool phenomena. Additionally, the fire department patrols the inlet in case of emergencies, and the police are often called to the scene to assist with water rescues off the Unprotected Inlet Beach. Furthermore, there was at least one other incident which lead to two other drowning deaths that occurred in almost the same exact fashion as the Brad Smith incident.

Lastly, the State of New Jersey knows and has reason to know of the dangerous conditions present on the Unprotected Inlet Beach because the New Jersey Marine Police often patrolled the Hereford Inlet. The Marine Police would respond to water rescues, drownings, missing persons, jet skiers in distress, and one Marine Police Officer even road by Brad Smith on the day of his drowning. The officer was on his way to save a stranded Jet Skier and did not see Brad Smith, but he was later made aware of the situation. Additionally, Dr. Farrell is the Director of the Coastal Research Center located at Richard Stockton College, Dr. Farrell studies the North Wildwood Beaches including the Unprotected Inlet Beach and makes replenishment suggestions to the City of North Wildwood every year, and accordingly, Dr. Farrell was aware of the geographical conditions of the Unprotected Inlet Beach.

The City of North Wildwood and the State of New Jersey know and have reason to know of the dangerous conditions present on the Unprotected Inlet Beach as evidenced by the prior testimony of multiple government officials.

IV. The City of North Wildwood and the State of New Jersey have Control over the Unprotected Inlet Beach

The City of North Wildwood and/or the State of New Jersey have control over the Unprotected Inlet Beach. The Court in Hackensack Riverkeeper, Inc., v. New Jersey Dept.

of Environmental Protection recognized that, “The Legislature had specifically granted municipalities the authority to exercise their police powers over publicly-owned lands.” 443 N.J. Super. 293, 304 (App. Div. 2015). Additionally, the Court noted that “seashore municipalities have exclusive control over municipally owned beaches.” Idib. As noted in State of New Jersey v. Oliver, et als. N.J.S.A. 40:48-1(9) empowers municipalities to make and enforce ordinances to, among other things, “regulate or prohibit swimming or bathing in the waters of, in, or bounding the municipality.” 320 N.J. Super. 405, 414 (App. Div. 1999). The municipalities are also authorized to “establish, maintain, regulate, and control a lifeguard upon any beach within or bordering on the municipality.” Ibid. Furthermore, the Statute grants the municipalities, “the governing body of any municipality bordering on the Atlantic ocean . . . exclusive control, government and care thereof and of any boardwalk, bathing and recreational facilities, . . . and it may, by ordinance, make and enforce rules and regulations for the government and policing of such lands, boardwalk, bathing facilities.” Ibid. The Court concluded that there can be little doubt that the municipality may appropriately regulate activities on the beach and waters bounding the municipality. Ibid.

Most notably the Court stated:

The right of the public to enjoy that property encompassed by the doctrine is not inconsistent with the right of the sovereign, as trustee, to protect those utilizing such property. This is the essence of the government's inherent authority, if not its obligation, to act in the interest of the public safety and welfare, an issue we address more fully infra. See Matthews, supra, 95 N.J. at 332; Van Ness v. Borough of Deal, 78 N.J. 174, 178 (1978) (“Of course, the municipality in the exercise of its police power and in the interest of public health and safety, would have the right to adopt reasonable regulations as to the use and enjoyment of the beach area.”). Such action may take the form of the legitimate exercise of police power, for example, to close beaches and preclude use of property, even that falling within the Public Trust Doctrine, when

the public safety and welfare is threatened. From such authority the sovereign can confer jurisdiction and cede regulatory authority to municipalities and their courts. The Legislature has vested such authority and jurisdiction in the Borough and its municipal court. Defendants' arguments to the contrary are rejected. Id. at 415-16.

Additionally, in James, the Court noted:

there is no requirement that a defendant have the kind of control defendants suggest—actual control over the instrumentality of the nuisance at the time and place it does harm. Contributing to a public nuisance through or with the conduct of others is sufficient for liability if the defendant knew or should have known the consequences. 359 N.J. Super. 291, 332.

Here, defendants knew of the harms that came from leaving the Unprotected Inlet Beach (1) unprotected, and (2) open to the public. Therefore, this is sufficient conduct for liability because the defendants knew of the consequences. Moreover, in line with the Court's analysis in Oliver, it is within the City of North Wildwood's jurisdiction to enforce rules and to close down the Unprotected Inlet Beach for the welfare of the public. Additionally, the beach and the bordering waters were in the control of North Wildwood in as much as they were responsible for providing lifeguards and protection and enforcing the laws and order.

Even if the Court does not find that to be the case, the State of New Jersey was made aware of the dangerous conditions on the Unprotected Inlet Beach, the State has notice of this Order to Show Cause and the State of New Jersey is a party to this action who can be Order to permanently close the Unprotected Inlet Beach.

V. Injunctive Relief Standard

The Court in Verna v. Links at Valleybrook Neighborhood Ass'n, described equitable relief as follows:

Equitable relief in the form of a permanent injunction is an extraordinary remedy. "A permanent injunction requires proof that the applicant's legal right to such relief has been established and that the injunction is necessary to prevent a continuing injury.... Such relief, though must not be more extensive than is reasonably required to protect the party's interest in whose favor it is issued. 371 N.J. Super 77, 89 (App. Div. 2004)

Additionally, the Restatement (Second) of Torts §936 (1977), provides, that relevant factors in determining an application for permanent injunctive relief are as follows:

(1)The character of the interest to be protected; (2) the relative adequacy of the injunction to the plaintiff as compared with other remedies; (3) the unreasonable delay in bringing suit; (4) any related misconduct by plaintiff; (5) the comparison of hardship to plaintiff is relief is denied, and hardship to defendant if relief is granted; (6) the interests of others, including the public; and (7) the practicality of framing the order or judgment.

CONCLUSION

The conditions which are present at the Unprotected Inlet Beach in North Wildwood, New Jersey, constitute a Public Nuisance which has caused Plaintiffs to endure a special injury, as Brad Smith was caused to lose his life due to the drop off which was present on the Unprotected Inlet Beach, as well as the vortex or whirlpool phenomena. The dangerous conditions which are present on the Unprotected Inlet Beach paired with the City of North Wildwoods constant promotion of the Unprotected Inlet Beach and failure to provide lifeguards constitute a public nuisance. The dangerous conditions are continuous


and ongoing, and Dr. Weggel has stated that the conditions will remain persistent and the beach must be closed for the safety of the general public to prevent future drownings.

The City of North Wildwood and the State of New Jersey knew and had reason to know of the public nuisance as numerous public officials had been notified and also had personally seen the conditions and were aware of their combined dangers. The City of North Wildwood had exclusive control to make and enforce rules governing the North Wildwood Beaches, the City of North Wildwood also had a duty to provide life guards and other protection for the waters off of the North Wildwood Beaches, and in the event that the Court finds that the water's edge where the event took place is tide lands and controlled by the State of New Jersey, the State of New Jersey was on notice of the dangerous conditions and patrolled the area frequently.

Accordingly, Plaintiffs now seek to have the City of North Wildwood and the State of New Jersey immediately and permanently enjoined from allowing public access to the Unprotected Inlet Beaches, reaching north of 1st Avenue and Surf Avenue until the end of the beach at the sea wall.

Dated: October 4, 2016

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SANDRA SMITH, INDIVIDUALLY AND AS EXECUTRIX OF THE ESTATE OF GEORGE BRADLEY SMITH, AND AS GUARDIAN AD LITEM FOR HER CHILDREN KOLE SMITH AND BRANDY SMITH, and NICOLE GAETA, KYLE SMITH;

Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

SUPERIOR COURT OF NEW JERSEY
CAPE MAY COUNTY
LAW DIVISION

DOCKET NUMBER: CPM-L-

CIVIL ACTION

ATTORNEY CERTIFICATION

Kasi M. Gifford, Esquire, of full age, hereby certifies:

1. I am a member of the law firm of D'Amato Law Firm, P.C., Attorneys for Plaintiff, Sandra Smith, individually and as Executrix of the Estate of George Bradley Smith, and as Guardian Ad Litem for her children Kole Smith and Brandy Smith, and Nicole Gaeta and Kyle Smith and am entrusted with the preparation of this case.
2. Attached hereto and made a part hereof at Exhibit A-1-A-14 are true and accurate copies of still aerial photographs of the Hereford Inlet taken by a drone on July 31, 2014.
3. Attached hereto and made a part hereof at Exhibit B-1 is a true and accurate copy of the Aerial Video Examination of the Hereford Inlet taken by drone on July 31, 2014.
4. Attached hereto and made a part hereof at Exhibit C-1 is a true and accurate copy of Cape May County Planning Department Aerial Photographs of the Hereford Inlet from 1920 through February 22, 2013.
5. Attached hereto and made a part hereof at Exhibit D-1-D-243 are true and accurate copies of Aerial Photographs taken from Helicopter of the Hereford Inlet on March 1, 2016.

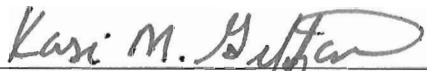
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6. Attached hereto and made a part hereof at Exhibit E-1 is a true and accurate copy of a photograph which illustrates two City of North Wildwood Police Officers patrolling the Beach on June 20, 2014.
7. Attached hereto and made a part hereof at Exhibit F-1 is a true and accurate copy of a photograph which illustrates City of North Wildwood Public Works employees working on the Inlet Beach on June 20, 2014.
8. Attached hereto and made a part hereof at Exhibit G-1 is a true and accurate copy of rescue/drowning reports for the years 2010-2015 comprised of data compliments of North Wildwood Police Department, North Wildwood Beach Patrol., and North Wildwood Fire Department.
9. Attached hereto and made a part hereof at Exhibit H-1 is a true and accurate copy of North Wildwood Resolutions designating the Lifeguard Protected Beaches from the years 2004 to 2011.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.


Kasi M. Gifford, Esquire
Attorney for Plaintiff

Dated: 10/4/16

D'AMATO LAW FIRM

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SANDRA SMITH, INDIVIDUALLY AND AS EXECUTRIX OF THE ESTATE OF GEORGE BRADLEY SMITH, AND AS GUARDIAN AD LITEM FOR HER CHILDREN KOLE SMITH AND BRANDY SMITH, NICOLE GAETA, KYLE SMITH;

Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

**SUPERIOR COURT OF NEW JERSEY
LAW DIVISION-CAPE MAY COUNTY
DOCKET NUMBER: L-**

Civil Action

**CERTIFICATION OF
J. RICHARD WEGGEL, Ph.D., P.E., D.CE**

I, J. Richard Weggel, Ph. D., P.E., D.CE, of full age, hereby certify the following:

1. Attached hereto and made a part hereof is a true and accurate copy of my report dated April 19, 2016, titled, "Conditions in Hereford Inlet, North Wildwood, NJ, Leading to the Drowning Death of Mr. Brad Smith, 27 July 2012."

2. Attached hereto and made a part hereof is a true and accurate copy of my supplemental report, dated July 18, 2016, titled, "Addendum To: Conditions in Hereford Inlet, North Wildwood, NJ, Leading to the Drowning Death of Mr. Brad Smith, 27 July 2012."

3. Attached hereto and made a part hereof is a true and accurate copy of my curriculum vitae.

4. I am prepared to come to Court in order to provide testimony in support of this Order to Show Cause, to explain to the Court why more people will drown if the Unprotected Inlet Beach is not permanently closed.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



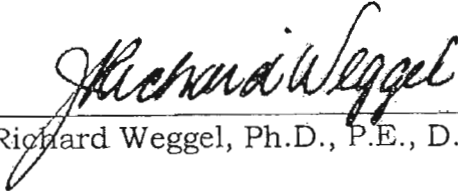
Richard Weggel

Dated: 28 Sept ., 2016

**CONDITIONS IN HEREFORD INLET, NORTH WILDWOOD, NJ, LEADING TO
THE DROWNING DEATH OF MR. BRAD SMITH, 27 JULY 2012.**

prepared for
D'Amato Law Firm
2900 Fire Road, Suite 200
Egg Harbor Township, New Jersey 08234

prepared by
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J. Richard Weggel, Ph.D., P.E., D.CE.

19 April 2016

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INTRODUCTION

On 27 July 2012 Mr. Brad Smith and his daughter Brandi were walking along the Hereford Inlet shoreline in North Wildwood, NJ, along with Mr. Scott Sunderland and his daughter Ally. While walking in ankle-deep water, the beach beneath their feet gave way and they were swept into the inlet. Mr. Sunderland and his daughter were able to make their way back to shore. A jet-skier was able to rescue Brandi Smith; however, Mr. Smith was carried offshore. His body was recovered three days later; the cause of death was accidental drowning. The location where they were walking when the incident occurred was on the inlet beach at approximately Central Street extended. This report presents an analysis of conditions in Hereford Inlet which led to the drowning of Mr. Smith and the likelihood that similar conditions could reoccur.

TIDAL INLET PROCESSES

Tidal Inlet Hydraulics

Tidal inlets are waterways that connect the ocean with inland bays. The flow of water through inlets is driven by both astronomical tides and storm tides. Astronomical tides are the result of the gravitational attraction of both the moon and sun. The rotation of the earth-moon-sun system about the center of mass of the three bodies results in two tidal bulges, one on each side of the earth. Twice each month when the moon and sun are nearly aligned, the high tides produced by them are superimposed leading to higher than average high tides. These are termed "spring tides." During other times of the month lunar and solar high tides occur at different times during the day. When they oppose each other the lower than average tides are termed "neap tides."

During high tide in the ocean water flows from the ocean to the back bay and the bay's water level rises. However, by the time the water level in the bay has reached its maximum, the water level in the ocean has begun to go down and the direction of flow reverses flowing from the bay back to the ocean. Thus the water level in the bay is always trying to "catch up" with the water level in the ocean.

The direction of flow in the inlet reverses over a tidal cycle. When the water level in the ocean is above that in the bay, the flow (termed flood flow) is from the ocean into the bay. When the water level in the bay is higher than the water level in the ocean the flow (termed ebb flow) is from the bay to the ocean. Figure 1 is a schematic diagram of the ocean water level, the bay water level and the flow velocity in the inlet (Escoffier, 1977). (Also, see the blue bidirectional arrow on Figure 2.) The maximum ebb current velocity occurs when the ocean tide level is below the bay tide level. Maximum ebb velocity generally occurs on a falling ocean tide when the ocean tide is below mean sea level.

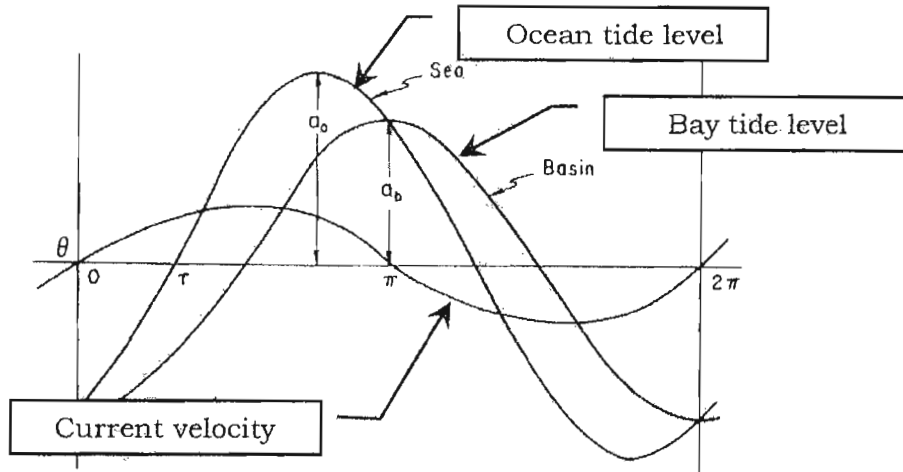


Figure 1 Schematic of Ocean Water Level, Bay Water Level and Tidal Current Velocity (Escoffier, 1977).



Figure 2 Hereford Inlet Showing Longshore Sediment Contributions from North Wildwood and Stone Harbor Beaches (White Arrows) and Flood and Ebb Currents (Bidirectional Blue Arrow) (Google Earth, 21 June 2015).

Inlet Sediment Processes

Tidal inlets are sediment traps. Much of the erosion that occurs along ocean coastlines is due to sand being carried into and retained by inlets. Sand is carried along ocean beaches by a process termed longshore transport which is the result of waves breaking at an angle with the shoreline. Breaking waves lift sediment into the water column by agitating the sand on the bottom. If the waves approach the shoreline at an angle, they also exert a stress on the water which carries the suspended sand along the shoreline. Thus, waves approaching the shoreline from the southeast will drive the current and sand northward. Waves approaching from the northeast will carry sand southward. See the white arrows on Figure 2.

NORTH WILDWOOD AND HEREFORD INLET PROCESSES

When waves approach North Wildwood from the southeast, they carry sand into Hereford Inlet. Thus the ocean beach in North Wildwood is the source of sand for North Wildwood's Hereford Inlet beach. However, when waves approach from the northeast they carry sand from Stone Harbor's beaches into the inlet. Generally, more sand enters the inlet from Stone Harbor than enters from North Wildwood. Along southern New Jersey beaches sand transport is predominantly southward because storm waves during the winter months most often approach shore from the northeast. During the summer months, waves most often approach from the southeast to carry sand northward, however, at a lesser rate because the waves are generally smaller. Thus, at Hereford Inlet more sand enters the inlet from the Stone Harbor side. The sand entering from Stone Harbor pushes the inlet navigation channel southward against the North Wildwood side. Thus the deep channel hugs the southerly side of the inlet. This navigation channel alignment is apparent from inlet surveys and aerial photos. Deep water almost always exists adjacent to the southerly inlet shoreline due to the influx of sand from Stone Harbor.

The Hereford Inlet beaches are reworked by ebb and flood currents exiting and entering the inlet. During flood flow, sand is carried into the inlet; during ebb flow sand is carried out. Some of the sand carried out is deposited on an ebb shoal when the ebbing current is slowed as it disperses in the ocean. The ebbing flow reworks the sand adjacent to the North Wildwood inlet shoreline and results in steep underwater slopes as evidenced by the deep water close to shore.

TIDES

Tides at Hereford Inlet are semi-diurnal with two highs two lows per day. The period of the primary tidal constituent is approximately 12 hours and 25 minutes. Astronomical tides (lunar and solar constituents excluding storm tides) are predicted for the ocean pier in Wildwood Crest, NJ, by the National Oceanographic and Atmospheric Agency's, National Ocean Service (NOAA, 2016). Tidal datums at Wildwood Crest are shown in Figure 3. The nearest location where tides are measured is Atlantic City, Tides at Hereford Inlet are

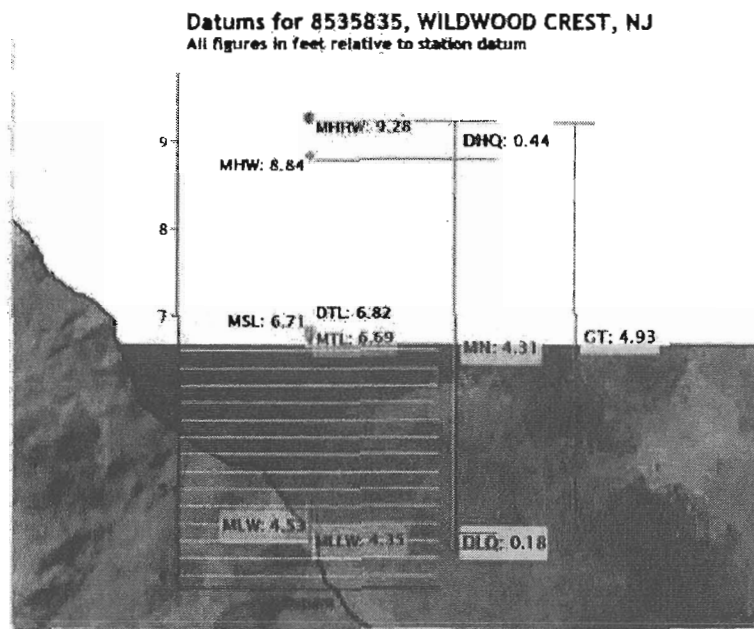


Figure 3 Tidal Datums at Wildwood Crest, NJ.

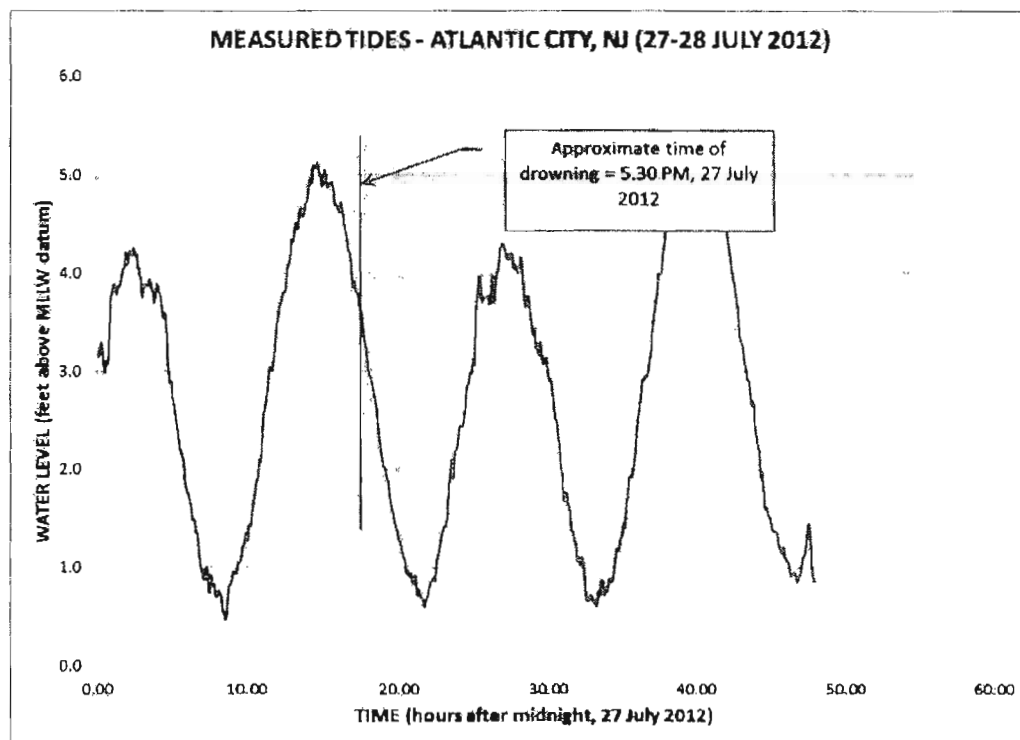


Figure 4 Tides Measured at Atlantic City, NJ, Showing Approximate Time of Drowning.

nearly synchronous with tides at Atlantic City differing by only about 3 to 5 minutes. Based on the description of events surrounding the drowning of Mr. Smith, the inlet current was flowing seaward and carried him into the ocean. Figure 4 shows the tide measured at Atlantic City at about the time of the drowning. The estimated time of the event, based on the deposition of Mr. Scott Sunderland and the tidal curve, is 5:30 PM on 27 July 2012 – during a falling tide when the water level was a little above mean sea level (MSL). This is approximately the time just preceding maximum ebb flow.

NORTH WILDWOOD INLET BEACH CONDITIONS AT THE TIME OF DROWNING

It is the writer's opinion that Brad Smith and his companions were swept into the inlet due to the failure of the underwater slope near the inlet beach. A deep hole adjacent to the North Wildwood inlet shoreline is a persistent feature along this beach. Mr. Smith and his companions walking in shallow water on the beach next to the deep channel exerted a surcharge (downward force) on the top of the slope which resulted in the beach sloughing into the channel carrying Mr. Smith and his companions into the ebbing current.

The Stockton Coastal Research Center (CRC) takes periodic surveys of Hereford Inlet for the New Jersey Department of Environmental Protection, Bureau of Coastal Engineering . Figure 5 is a CRC survey made around the time of Mr. Smith's drowning. Data were taken on 25, 26, 30 and 31 July 2012 to produce this survey. Shown on the figure is an area of closely spaced bathymetric contours indicating a steep slope at the approximate location where Mr. Smith was swept into the inlet. Figure 6 is a detail of that area. (Additional CRC surveys that show deep holes and steep slopes adjacent to the shoreline are presented in Appendix A.) In addition to the CRC surveys, the U.S. Army Corps of Engineers (COE) conducted Hereford Inlet bathymetric surveys in 2010, 2012 and 2014. Figure 7 shows the 2012 COE survey and Figure 8 is a detail from that survey. Four cross-sections from the 2012 survey are shown in Figure 9. (The three COE surveys along with profiles through the inlet for each survey are presented in Appendix B.)

The stable angle of an undisturbed, submerged, quartz sand slope ranges within a few degrees of 33° (Evans, 1995). The factor of safety for an undisturbed underwater slope is given by (Eckert & Callender, 1987),

$$F = \frac{\tan(\varphi)}{\tan(\theta)}$$

where F = the factor of safety, φ = the submerged angle of repose of the slope (approximately 33°) and θ = the angle the slope makes with a horizontal. A factor of safety greater than 1.0 indicates a stable slope. A factor of safety less than 1.0 indicates an unstable slope. The factor of safety against a slope failure during a falling tide when seepage from the beach into the inlet is occurring is given by (Eckert & Callender, 1987),

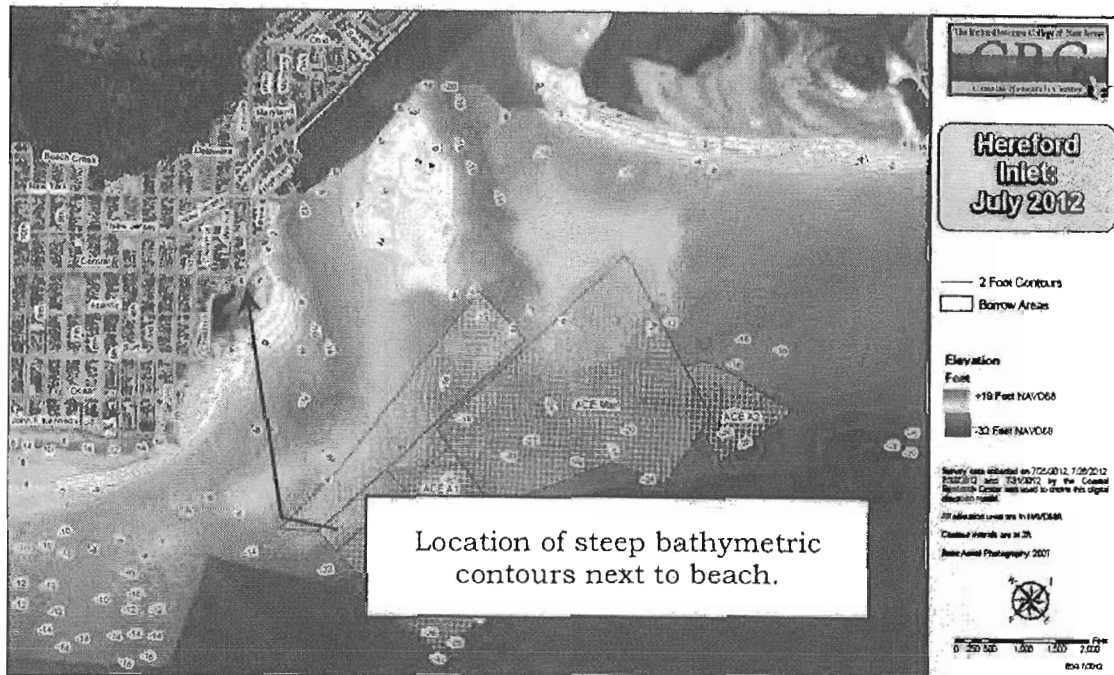


Figure 5 Hereford Inlet Survey, July 2012 (Stockton Coastal Research Center, 2012a)

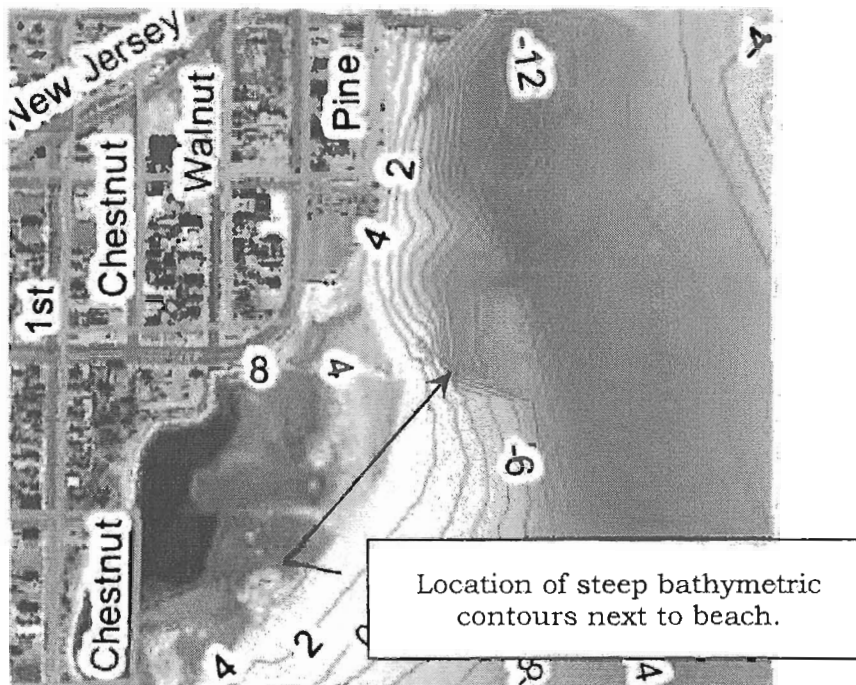


Figure 6 Detail of July 2012 Stockton Coastal Research Center Survey (Stockton Coastal Research Center, 2012a).

$$F = \frac{\gamma_b \tan(\varphi)}{\gamma \tan(\theta)}$$

where γ = the unit weight of the saturated sand (approximately 124.6 lb/ft³) and γ_b = the weight of the submerged sand (approximately 60.6 lb/ft³).

Table 1 presents slope angles obtained from the CRC and COE surveys along with the factors of safety given by the above two equations. The slopes for the CRC surveys were scaled from the contour lines on the figures in Appendix A. The slopes for the COE surveys were taken directly from cross-sections through the inlet as surveyed by the Corps. Example cross-sections from the 2012 COE survey are shown in Figure 9. The locations of the COE cross-sections of Figure 9 are shown in Figures 7 and 8. Table 1 shows three cases with seepage-induced by ebb flow where the factor of safety was below or close to 1.0 (values highlighted in last column). In one case the slope was unstable even in the absence of seepage (value highlighted in fourth column). Note that the factors of safety in Table 1 do not account for any surcharge on top of the slope. Figure 10 shows a detail of Profile C from the 2012 COE survey where the slope angle is 48.6° - the condition highlighted on Table 1.

Table 1 Slope Angles and Factors of Safety for Unloaded Slopes from CRC and COE Surveys.

Survey *	$\Delta z / \Delta x$ **	θ	$F = \tan\varphi / \tan\theta$	$F = \gamma_b \tan\varphi / \gamma \tan\theta$
CRC Mar 2011	0.200	11.3°	3.25	1.58
CRC Jul 2012	0.184	10.4°	3.53	1.71
CRC Dec 2012	0.161	9.1°	4.05	1.96
COE 2008 - B	0.230	12.9°	2.83	1.38
COE 2008 - C	0.205	11.6°	3.16	1.54
COE 2008 - D	0.148	8.4°	4.39	2.14
COE 2012 - B	0.070	4.0°	9.28	4.51
COE 2012 - C	1.134	48.6°	0.57	0.28
COE 2012 - D	0.108	6.2°	5.98	2.91
COE 2014 - B	0.138	7.9°	4.68	2.28
COE 2014 - C	0.291	16.2°	2.23	1.08
COE 2014 - D	0.314	17.4°	2.07	1.01

* COE survey indicates profile line from which slope angle was obtained.

** Tangent(θ)

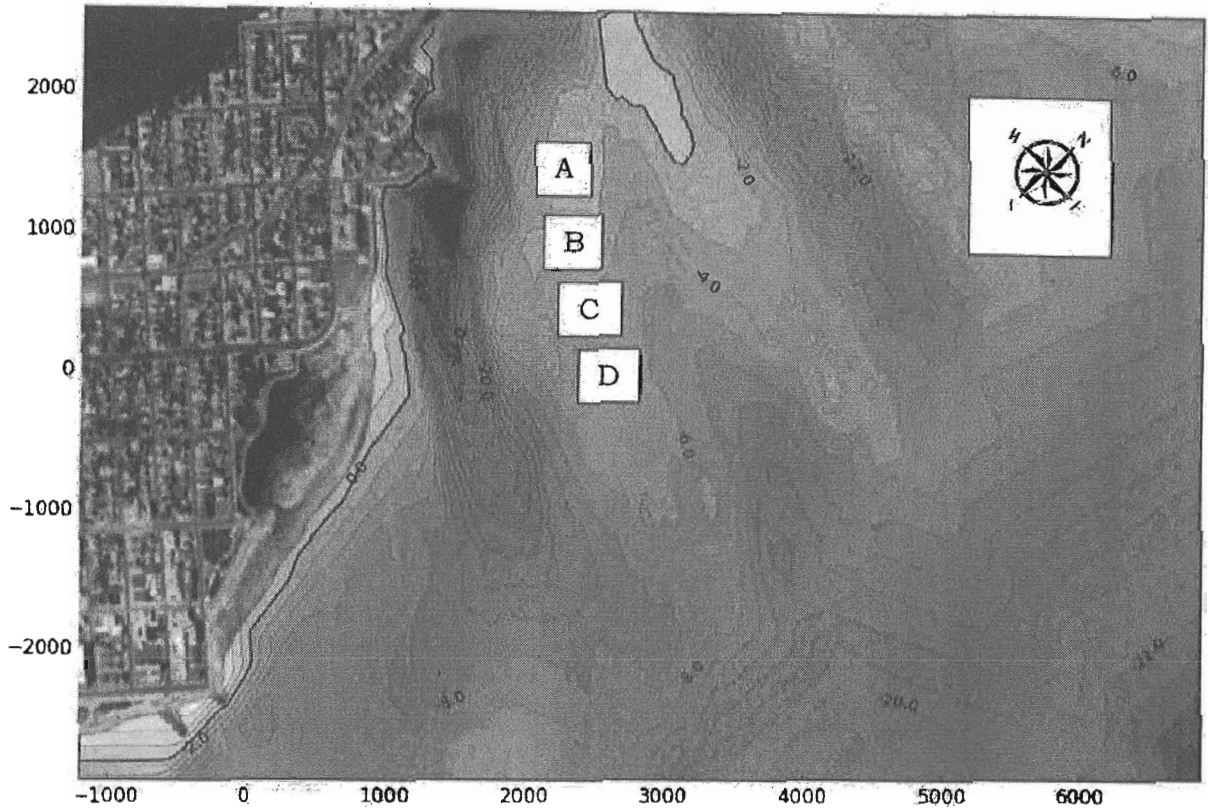


Figure 7 US Army Corps of Engineers Survey, December 2012.

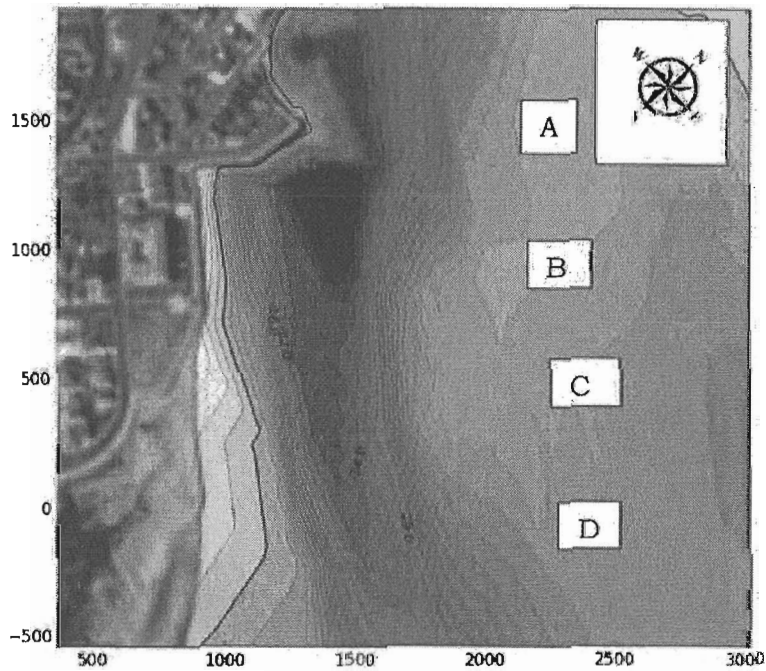


Figure 8 Detail from US Army Corps of Engineers Survey, December 2012.

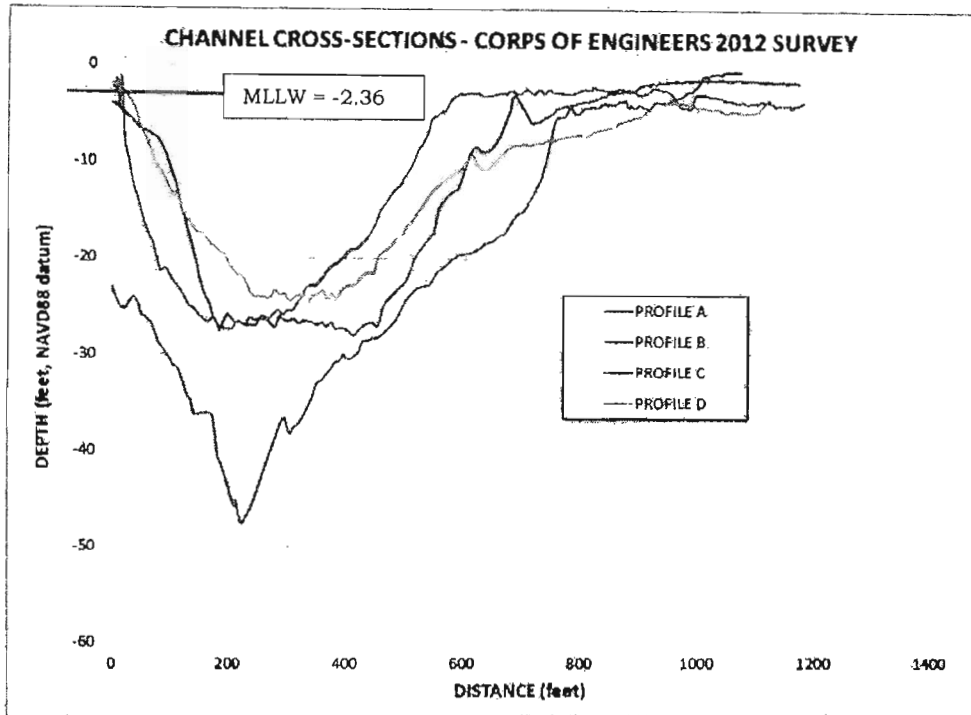


Figure 9 Corps of Engineers 2012 Survey Cross-Sections.

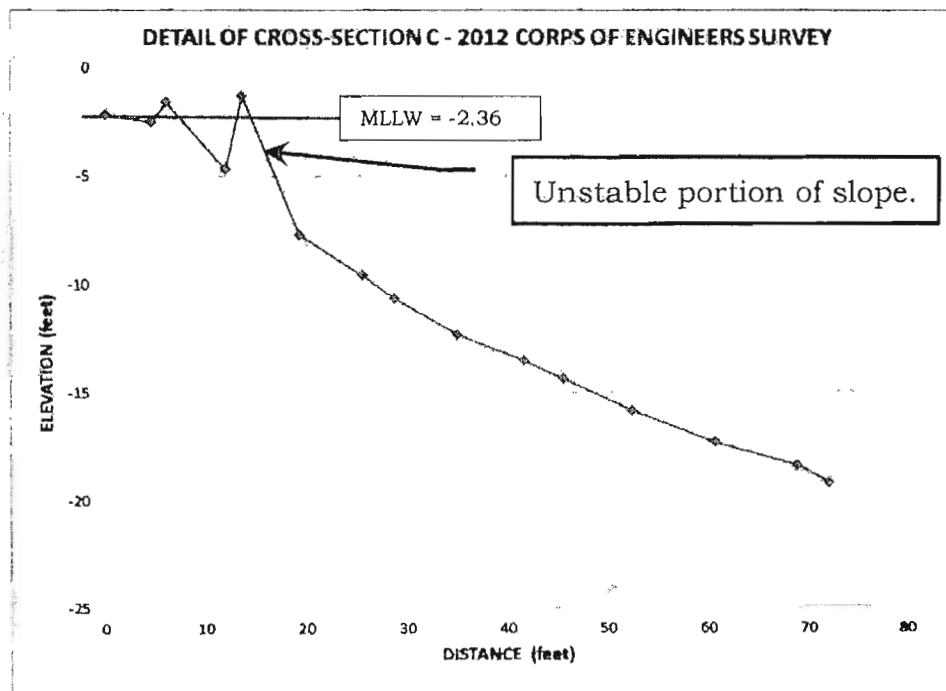


Figure 10 Detail from Cross-Section C, Corps of Engineers 2012 Survey.

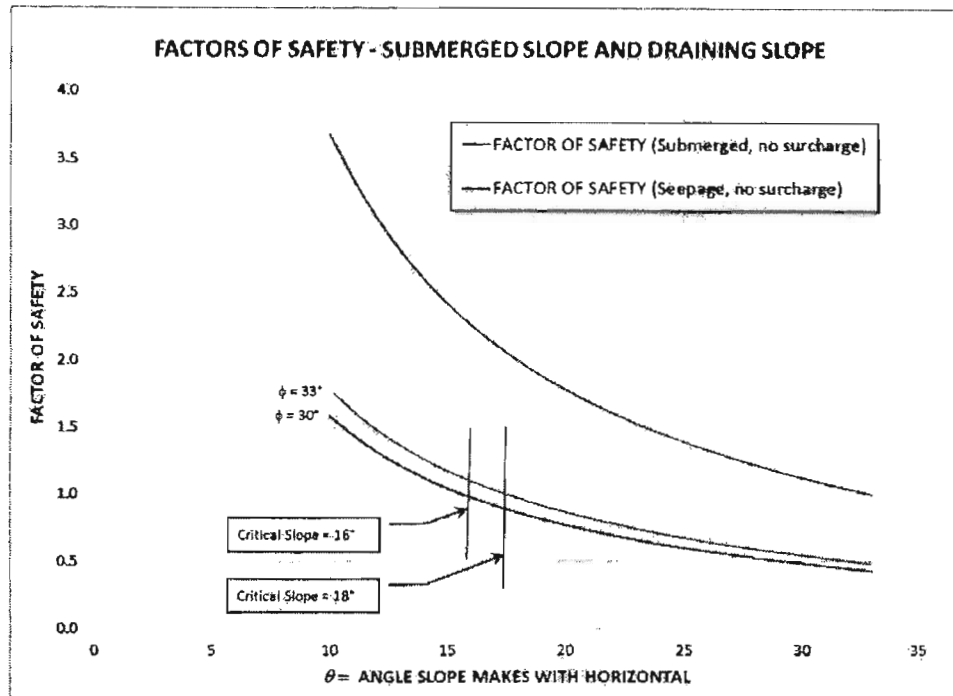


Figure 11 Factors of Safety for Various Submerged Slopes with and without Seepage (no surcharge).

Figure 11 shows the relationship between the factor of safety and the slope angle for both the submerged and seepage equations given above. The curved red lines are for the case where seepage from the slope into the channel occurs. The critical slope for a submerged angle of repose is 33° is 18° . Thus any slope steeper than 18° will be unstable. If the angle of repose is only 30° the critical slope is 16° . The critical angle for the submerged case without seepage is 33° - the submerged slope's angle of repose.

The surveys on which the preceding analyses are based probably did not measure the steepest underwater slopes because of the limited spatial distribution of the soundings. In addition, the surveys do not account for steepening of nearshore, underwater slopes during high ebb flow velocities. Neither does the analysis account for any load applied to the top of the slope. A person walking along the top of the slope will exert a downward force (surcharge) which reduces the factor of safety. If the factor of safety is reduced to less than 1.0, the slope will fail and slide into the inlet carrying with it anyone walking on top of it

Farrell (2013), in an interview, mentions a circular current at the inlet beach as well as "horizontal and vertical" currents that act to undercut the underwater slope and make it unstable.

A slope stability analysis which included a surcharge was made using Bishop's Simplified method of slices - a widely used geotechnical engineering procedure. A schematic of the procedure is shown in Figure 10. A circular

failure plane is assumed and the soil above the failure plane subdivided into vertical slices. The moments of the forces acting on the slices about the center of the failure plane are summed and the factor of safety is the ratio of the sum of the overturning moments divided by the sum of the restoring moments. A uniform surcharge was assumed over 4-foot wide top of the slope, shown as p on Figure 12. The equation for the factor of safety for a non-cohesive sediment such as beach sand is (Cernica, 1982),

$$F = \frac{\sum_{i=1}^{i=n} [(W_i - u_i b_i) \tan \phi] \left[1 / \cos \alpha_i \left(1 + \frac{\tan \alpha_i \tan \phi}{F} \right) \right]}{\sum_{i=0}^{i=n} W_i \sin \alpha_i}$$

where the subscript i indicates the slice, W_i = the weight of slice i , u_i = the pore water pressure, b_i = the width of the slice and α_i = the angle with a vertical of a line drawn from the center of rotation to the bottom of the slice. See Figure 12. An iterative procedure is required since F appears on both sides of the equation. The location of the center of rotation to find the minimum factor of safety is a trial and error procedure.

The surcharge used in the analysis assumed two adults, each weighing 180 lbs with their weight distributed over 4 feet at the top of the slope. A distributed force of $(2)(180)/4 = 90$ lbs/ft results. (Note that the force will likely be more concentrated than a uniformly distributed one.) Figure 13 summarizes the results of the slope stability analysis for three values of the slope's submerged angle of repose, $\phi = 30^\circ, 31^\circ$ and 33° . The lower envelope of the points indicates the stable slope. The three lines generally cross the factor of safety line of 1.0 at between 17° and 19° . Consequently, if the slope is steeper than about 17° the slope is likely to fail if a surcharge is imposed.

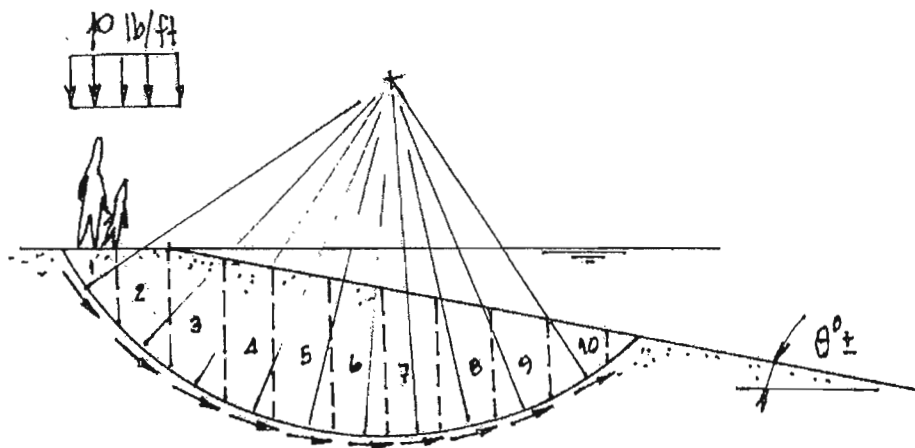


Figure 12 Schematic of Bishop's Simplified Method of Slices for Slope Stability Analyses.

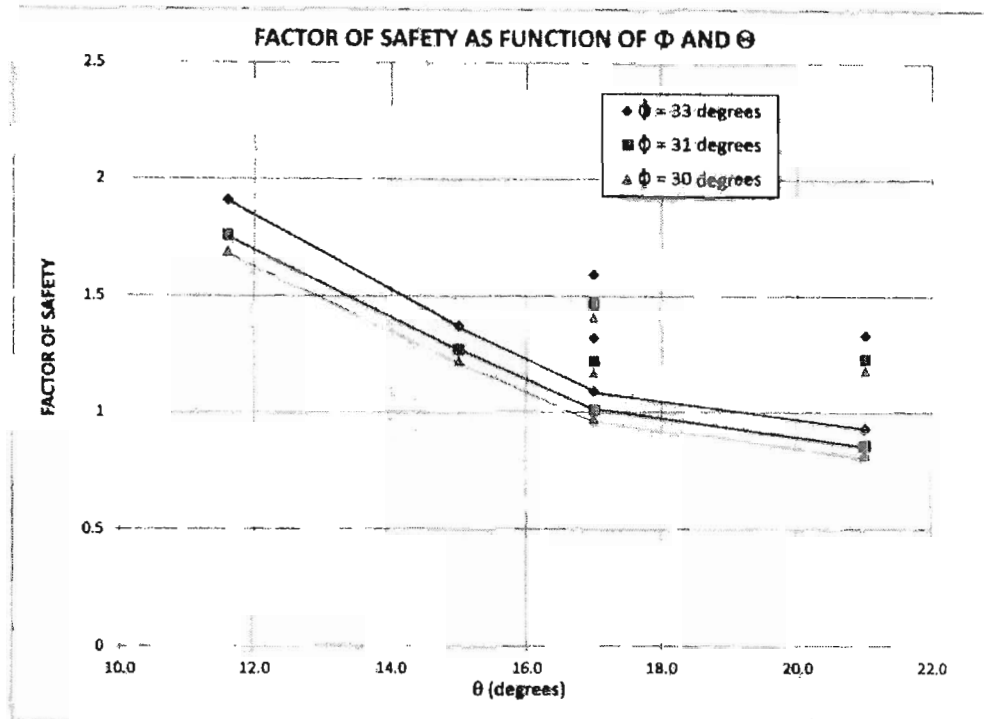


Figure 13 Factors of Safety as a Function of θ and ϕ for Slopes with Surcharge.

SUMMARY AND CONCLUSIONS

On 27 July 2012 Mr. Brad Smith and his daughter Brandi and Mr. Scott Sunderland and his daughter Ally were walking in ankle deep water along the shoreline adjacent to the navigation channel in Hereford Inlet, North Wildwood, NJ. The submerged slope along the top of which they were walking was likely not visible. The slope failed and slid into the inlet carrying Mr. Smith and his companions into the ebb flowing current. The Hereford Inlet shoreline is subject to strong ebb currents which scour the edge of the navigation channel steepening it to the point of instability. The imposition of any surcharge such as pedestrians walking on top of the slope will lead to its failure. A slope stability analysis indicates that if the submerged slope is steeper than about 17° it is subject to failure by the imposition of a surcharge. The steep navigation channel hugs the North Wildwood side of the inlet due to the sand transported into the inlet from the Stone Harbor side. This is a persistent condition observable in the several bathymetric surveys of the inlet conducted by the Stockton Coastal Research Center and the U.S. Army Corps of Engineers. (See Appendixes A and B.) The slope stability conditions and their location on the inlet shoreline that led to the drowning are likely to occur again because of the persistence of the navigation channel's location along the North Wildwood inlet shoreline and the high ebb tide currents. The location of the unstable slope is generally unpredictable and will vary from time to time. Figure 14 is a photograph of the inlet shoreline taken on 1 March 2016 that shows the

presence of the deep channel adjacent to the inlet beach. The area indicated on the photograph is where an ebbing current can undermine the slope causing a failure of the kind leading to Mr. Smith's drowning.

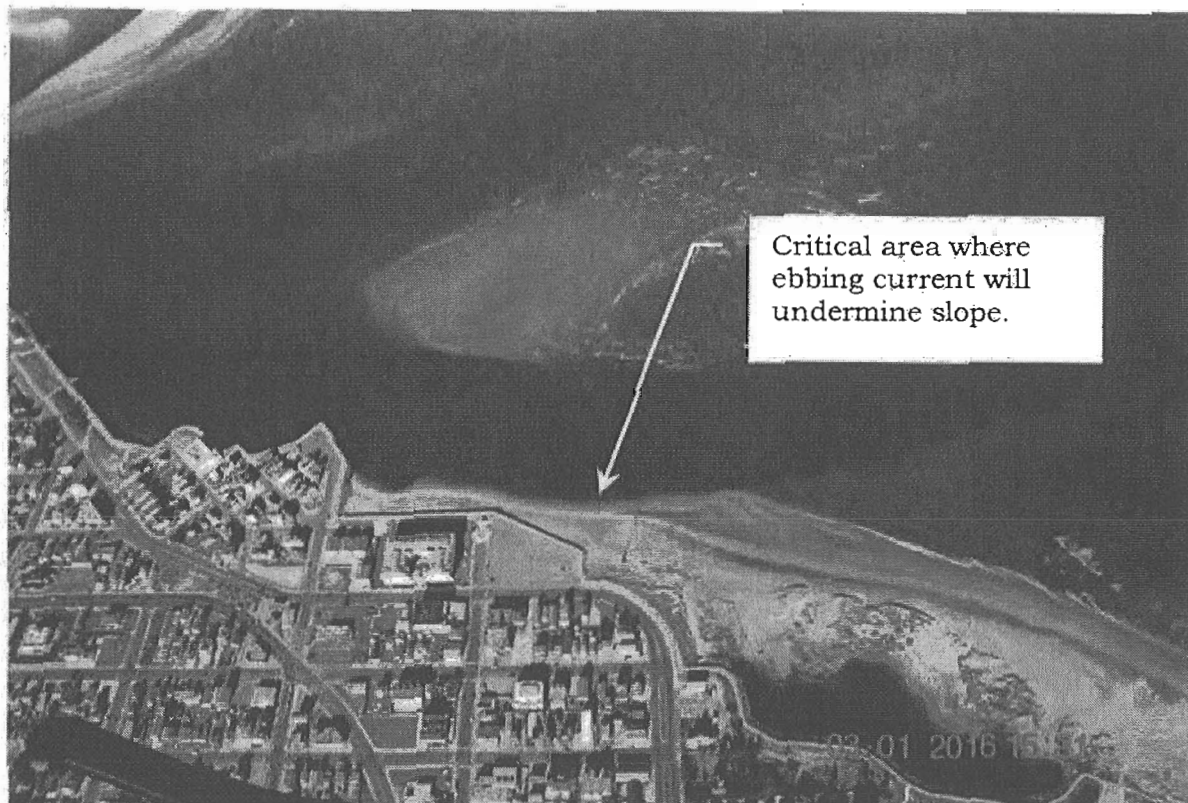


Figure 14 Aerial Photograph of Hereford Inlet Shoreline Showing Location of Area Susceptible to Undermining, 1 March 2016.

REFERENCES

Cernica, J.N. (1982) *Geotechnical Engineering*, Holt, Reinhart & Winston, New York, NY, 1982.

Eckert, J & G. Callender (1987) "Geotechnical Engineering in the Coastal Zone," Department of the Army, Waterways Experiment Station, Corps of Engineers, P.O. Box 631, Vicksburg, MS, 39180-0631, February 1987.

Escoffier, F.F. (1977) "Hydraulics and Stability of Tidal Inlets," GITI Report 13, U.S. Army Coastal Engineering Research Center, Fort Belvoir, VA, August 1977.

Evans, N.C. (1995) "Stability of Submarine Slopes," GEO Report No. 47. Geotechnical Engineering Office, Civil Engineering Department, 101 Princess Margaret Road, Homantin, Kowloon, Hong Kong, June 1995.

Farrell (2013), Interview of Stewart Farrell by A & K Investigations of New Jersey, 1 February 2013.

NOAA (2016) Tide predictions for Wildwood Crest, NJ.
<https://tidesandcurrents.noaa.gov/noaatidepredictions/NOAATidesFacade.jsp?Stationid=8535835>

Stockton Coastal Research Center (2011) "Hereford Inlet, March 2011," The Richard Stockton College of New Jersey, Coastal Research Center, March 2011.

Stockton Coastal Research Center (2012a) "Hereford Inlet, July 2012," The Richard Stockton College of New Jersey, Coastal Research Center, July 2012.

Stockton Coastal Research Center (2012b) "Hereford Inlet, March 2011, Digital Elevation Model" The Richard Stockton College of New Jersey, Coastal Research Center, December 2012.

APPENDIX A
Stockton Coastal Research Center Surveys

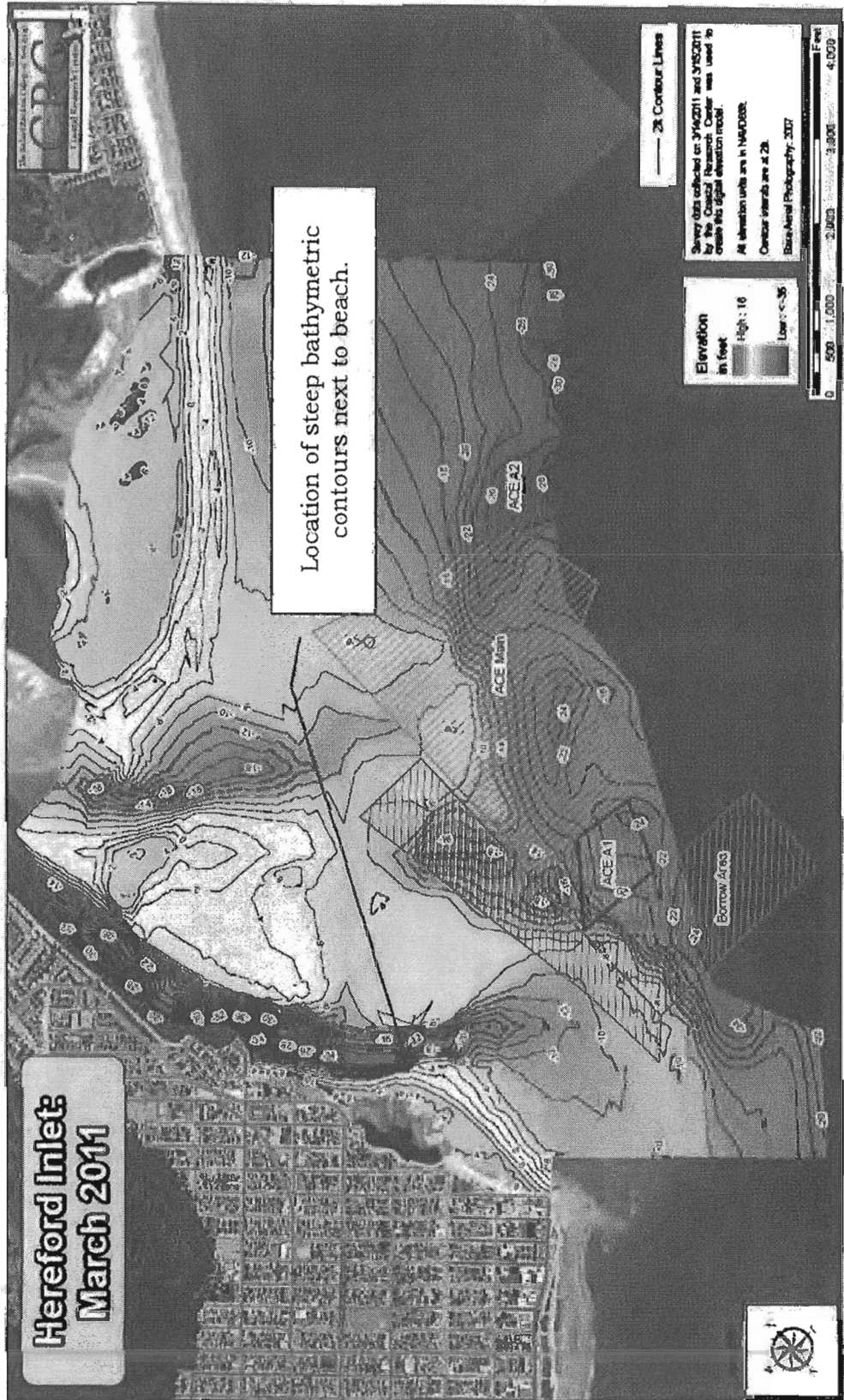


Figure A-1 Hereford Inlet Survey, March 2011 (Stockton Coastal Research Center, 2011a).

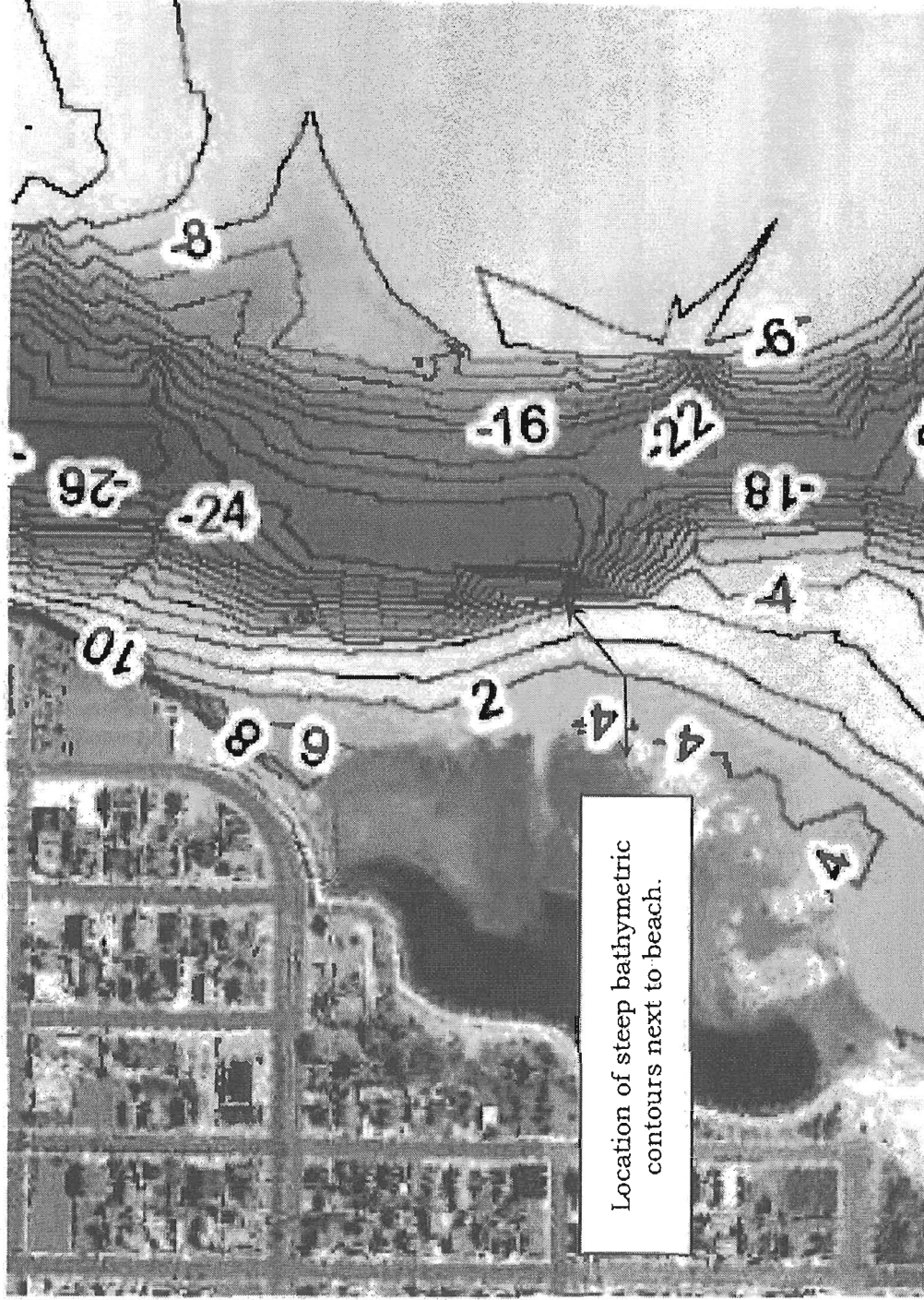


Figure A-2 Detail of March 2011 Stockton Coastal Research Center Survey (Stockton Coastal Research Center, 2011).

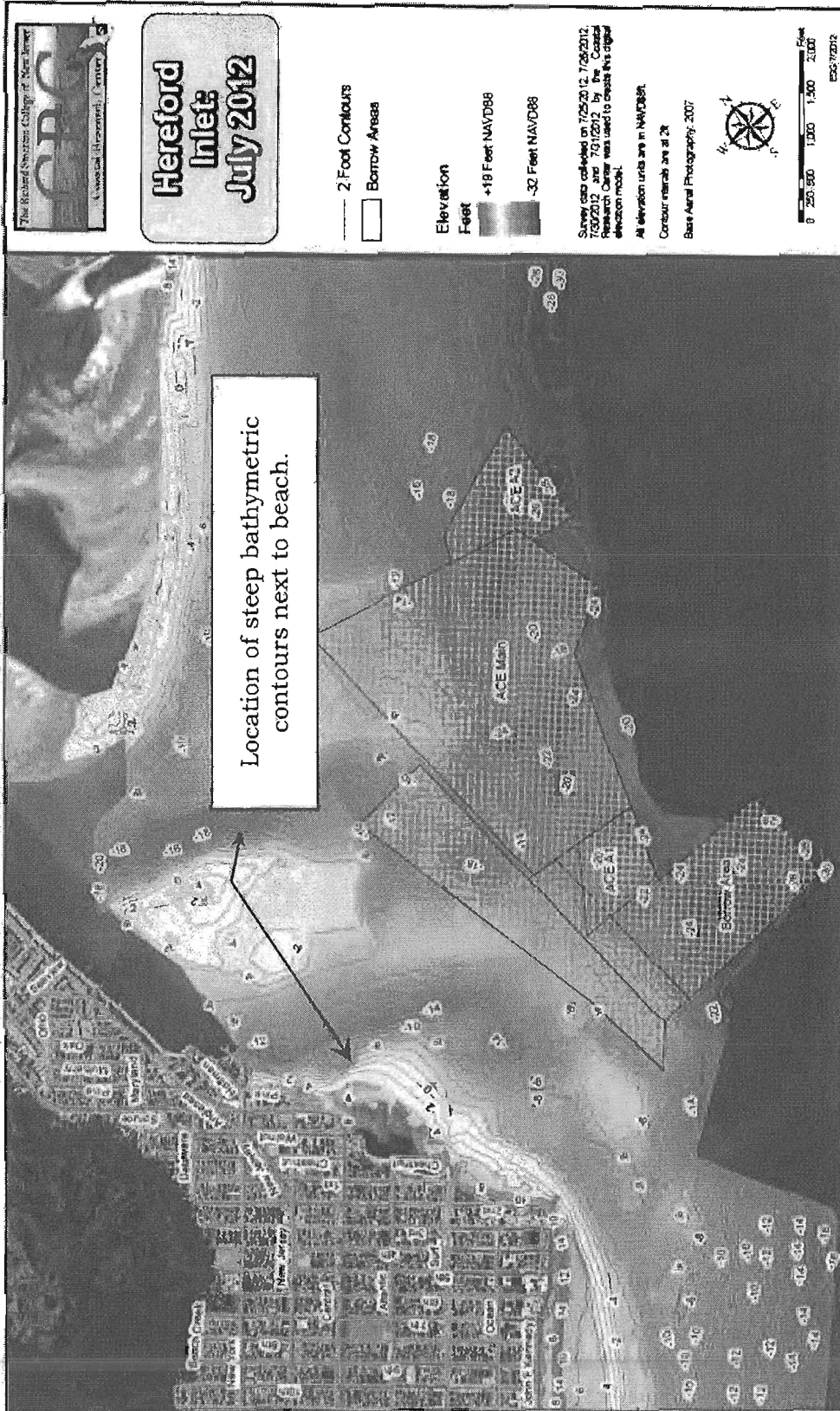


Figure A-3 Hereford Inlet Survey, July 2012 (Stockton Coastal Research Center, 2012a).

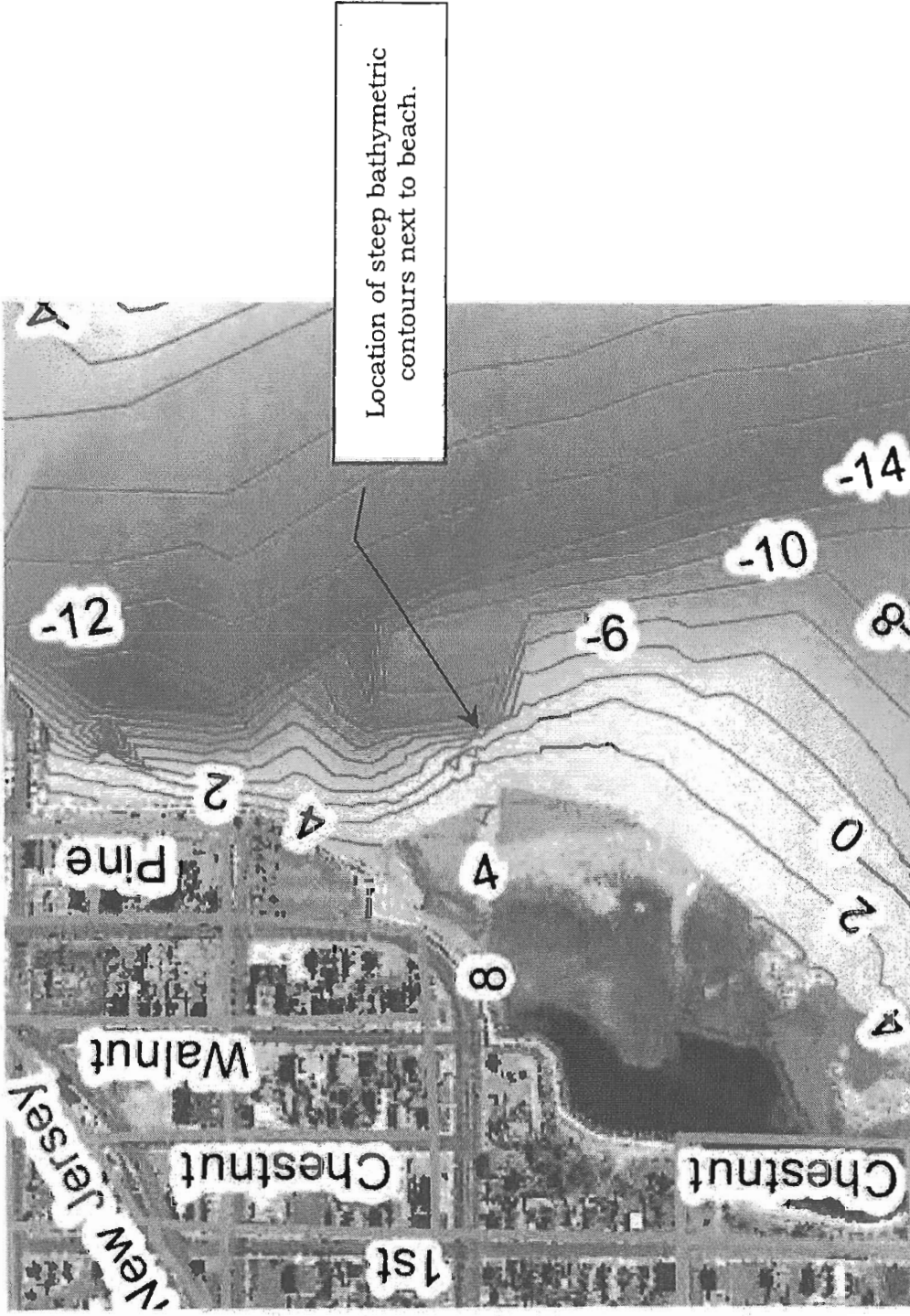


Figure A-4 Detail of July 2012 Stockton Coastal Research Center Survey (Stockton Coastal Research Center, 2012a).

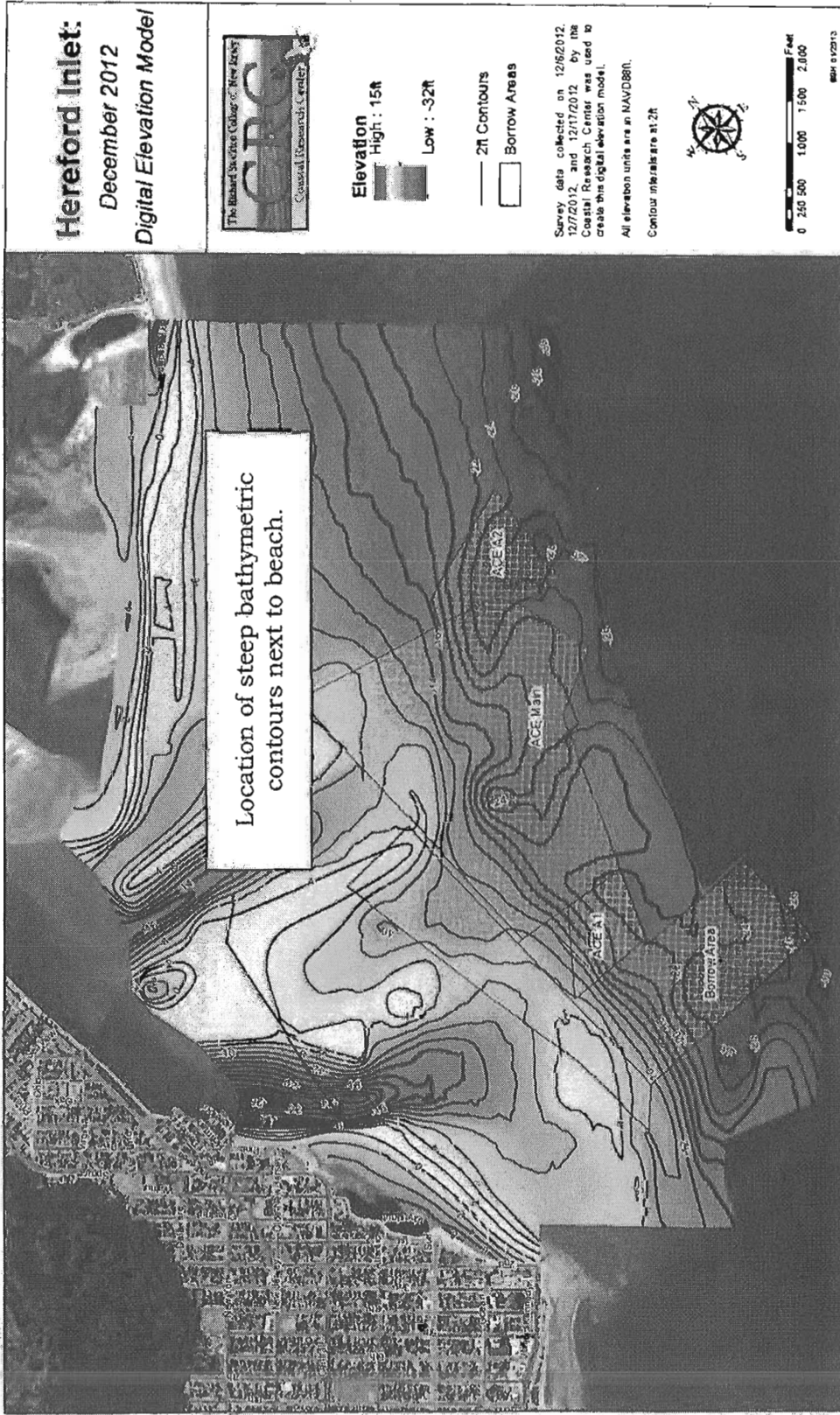


Figure A-5 Hereford Inlet Survey, December 2012 (Stockton Coastal Research Center, 2012b).

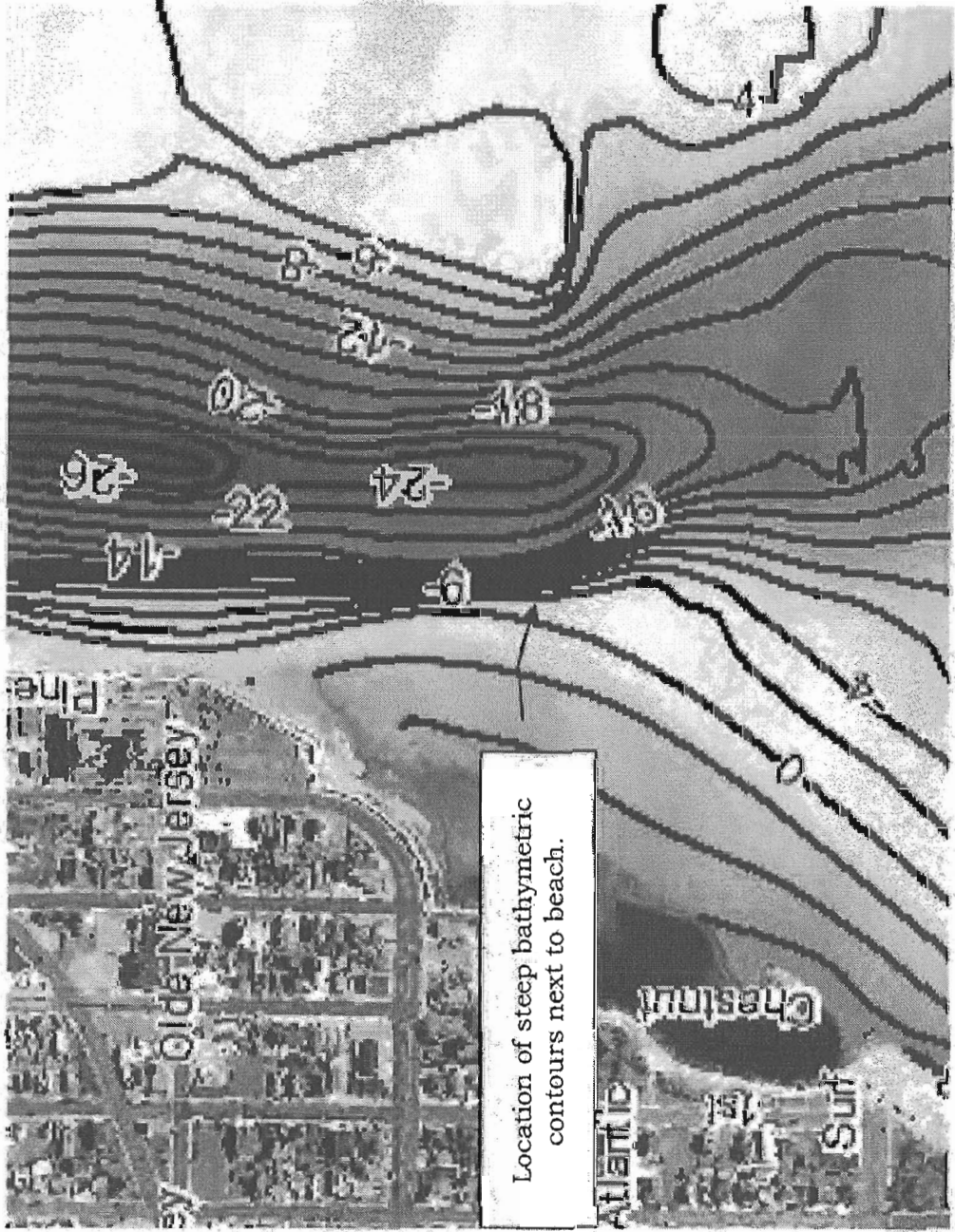


Figure A-6 Detail of December 2012 Stockton Coastal Research Center Survey (Stockton Coastal Research Center, 2012b)

APPENDIX B

U.S. Army Corps of Engineers Surveys and Cross-Sections.



Figure B-1 Corps of Engineers' Survey, August 2010.

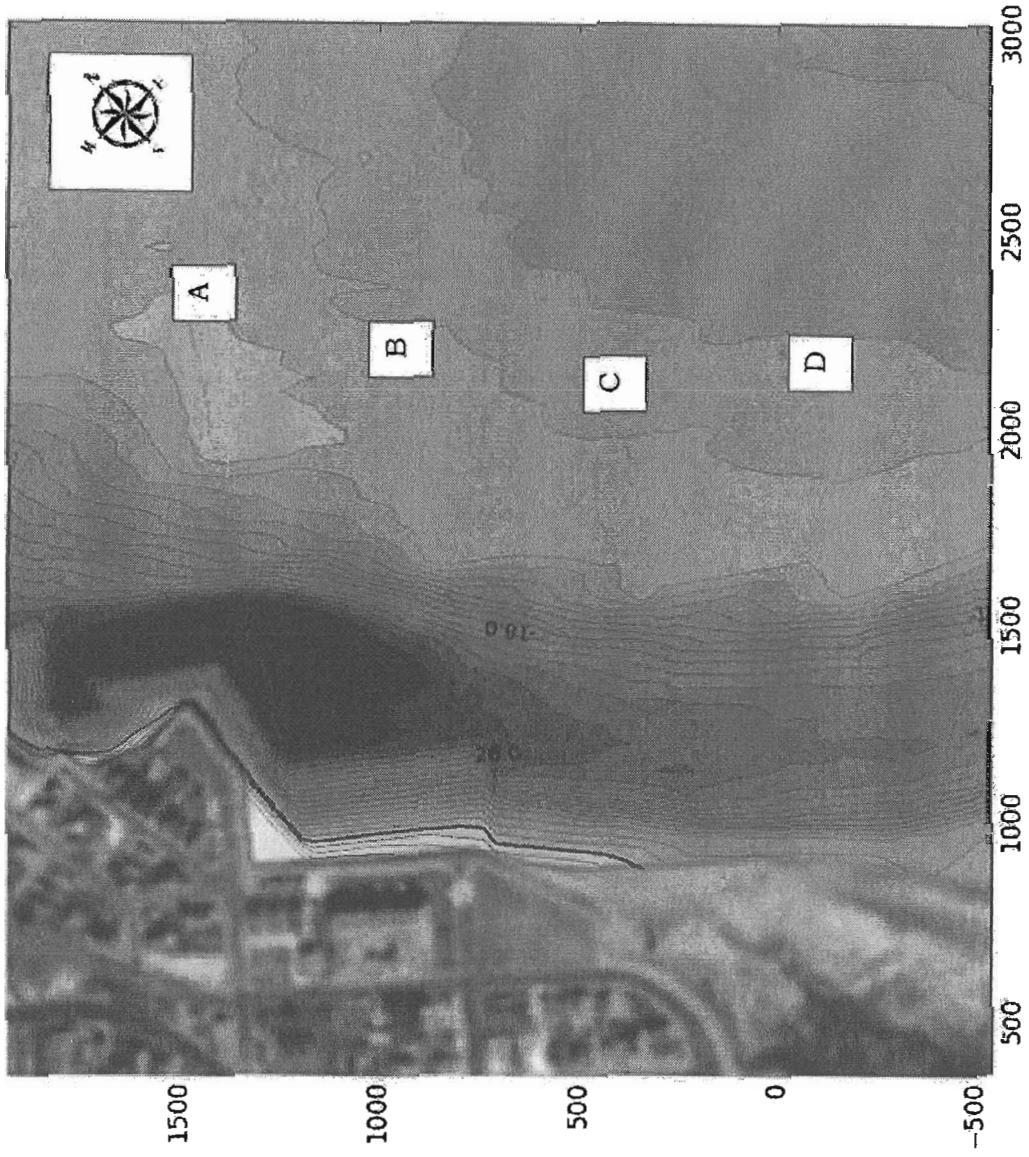


Figure B-2 Detail of Corps of Engineers' Survey, August 2010.

CHANNEL CROSS-SECTIONS - CORPS OF ENGINEERS 2010 SURVEY

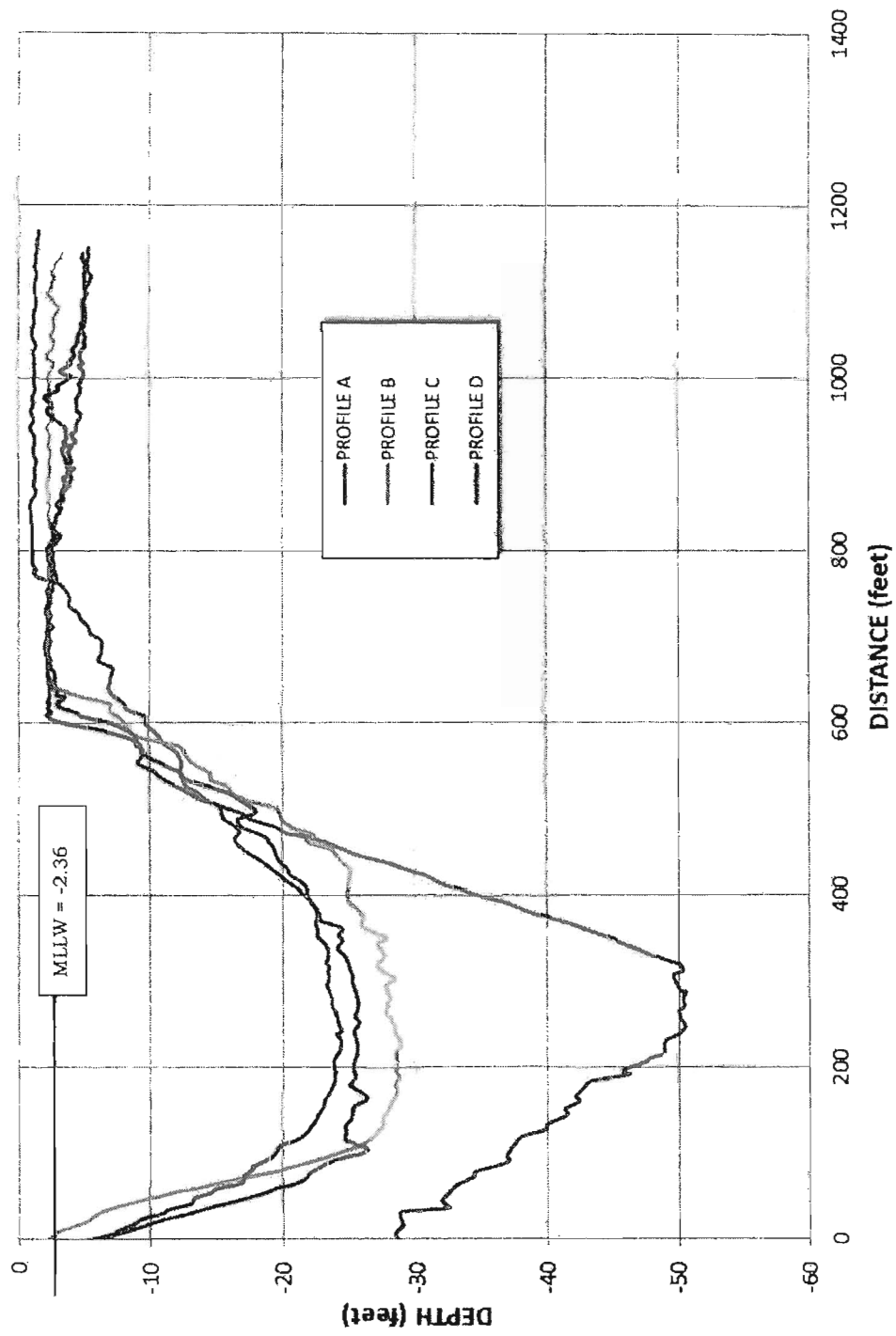


Figure B-3 Corps of Engineers' Profiles, 2010 Survey.

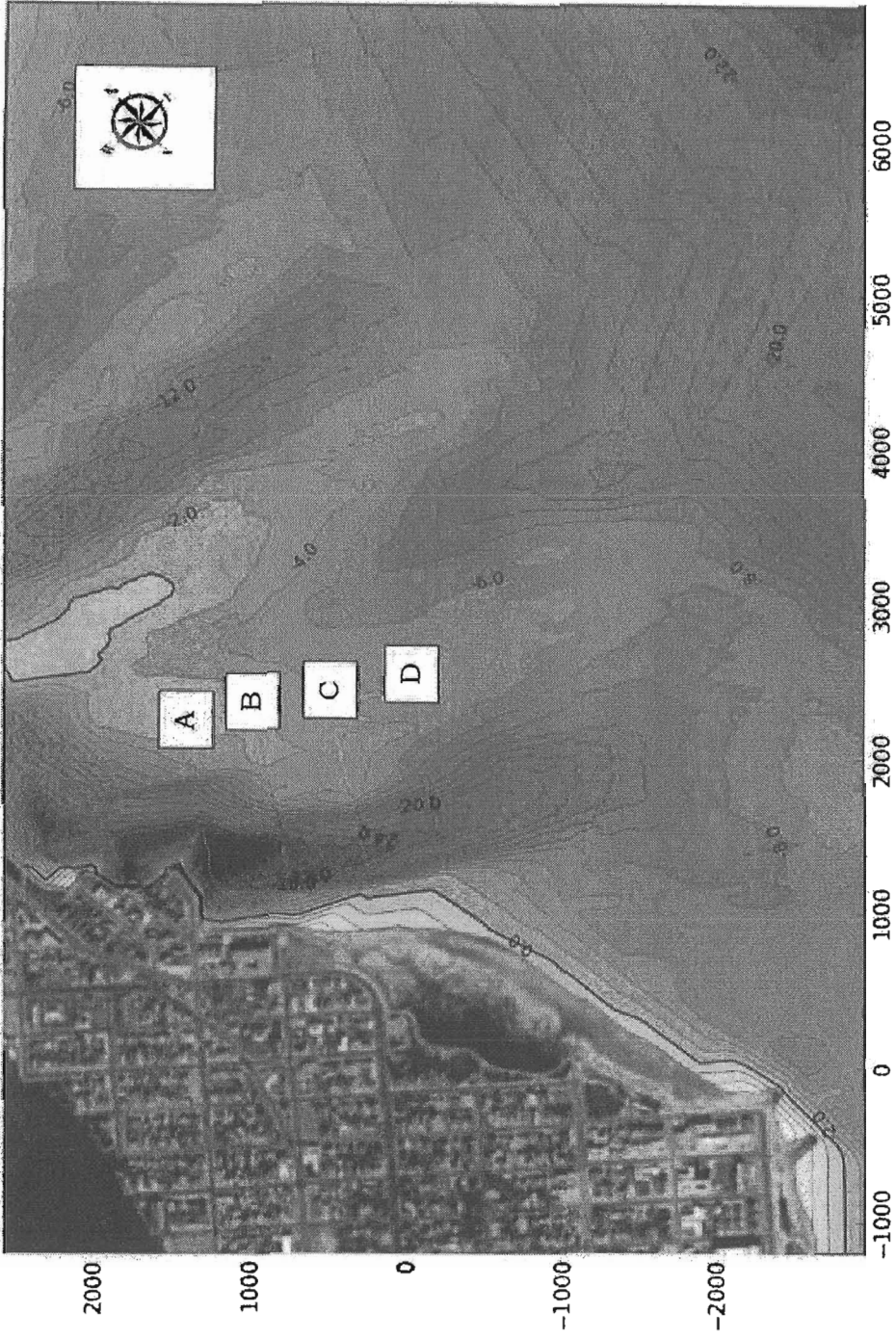


Figure B-4 Corps of Engineers' Survey, December 2012.

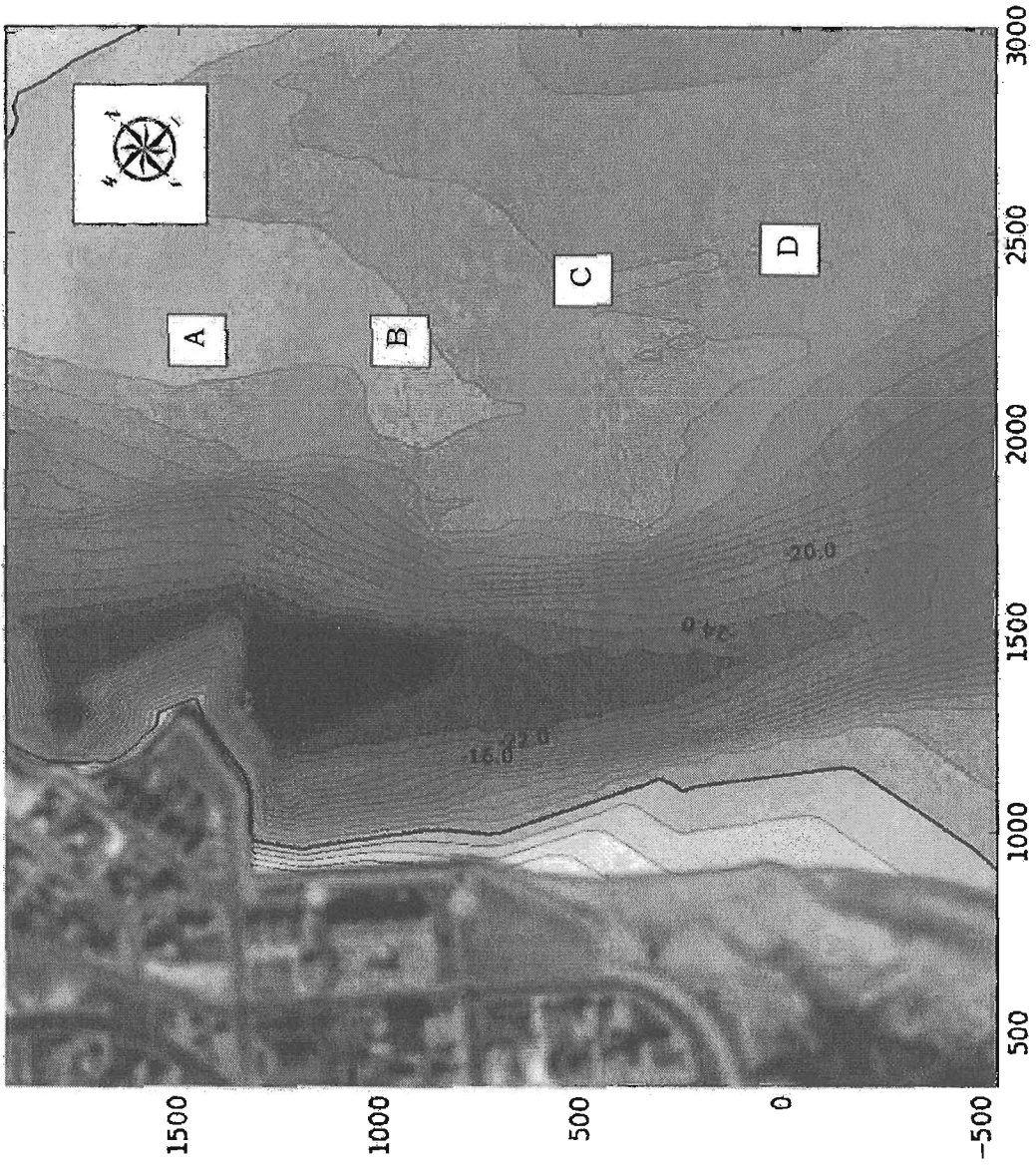


Figure B-5 Detail of Corps of Engineers' Survey, December 2012.

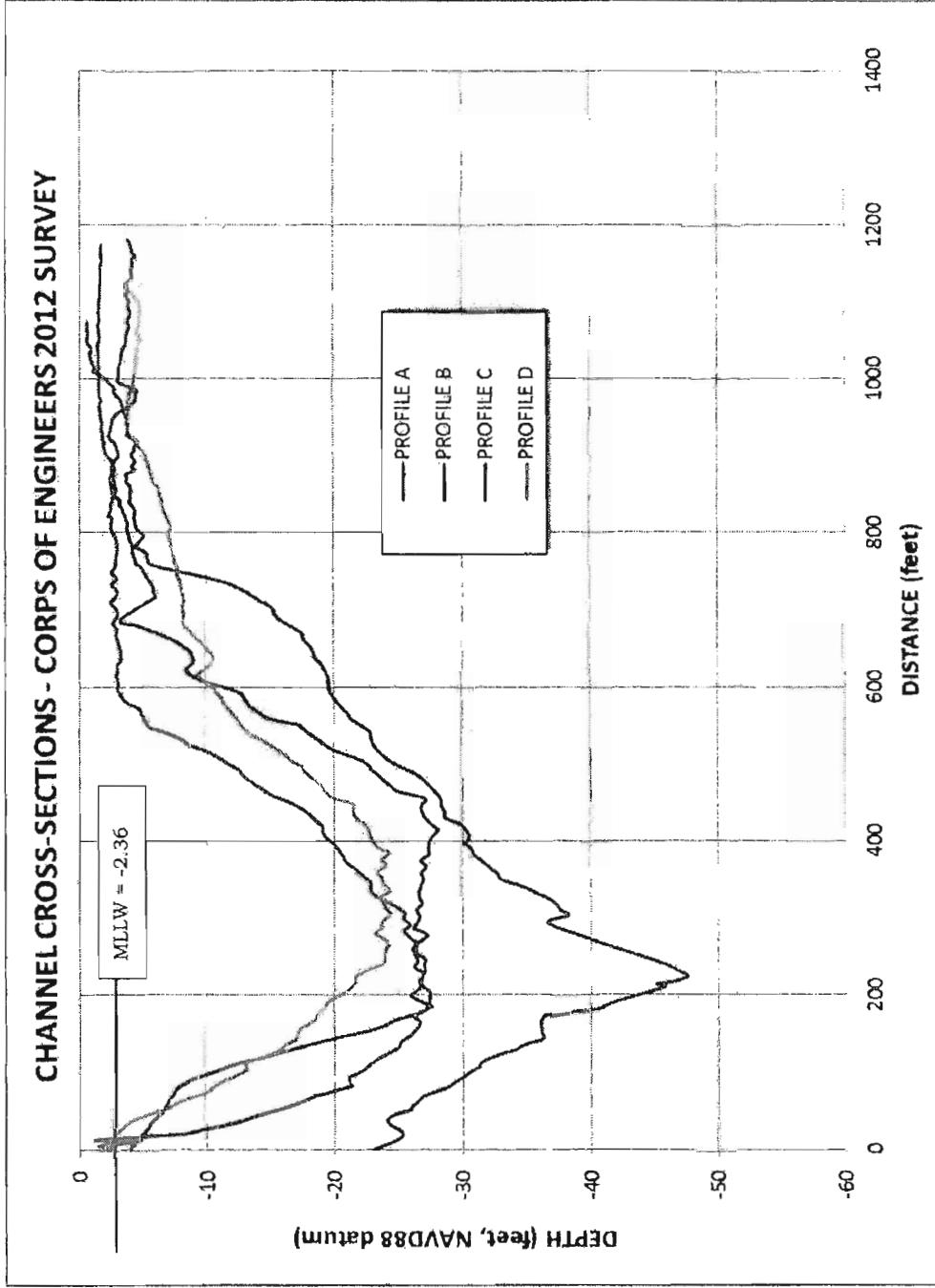


Figure B-6 Corps of Engineers' Profiles, 2012 Survey.

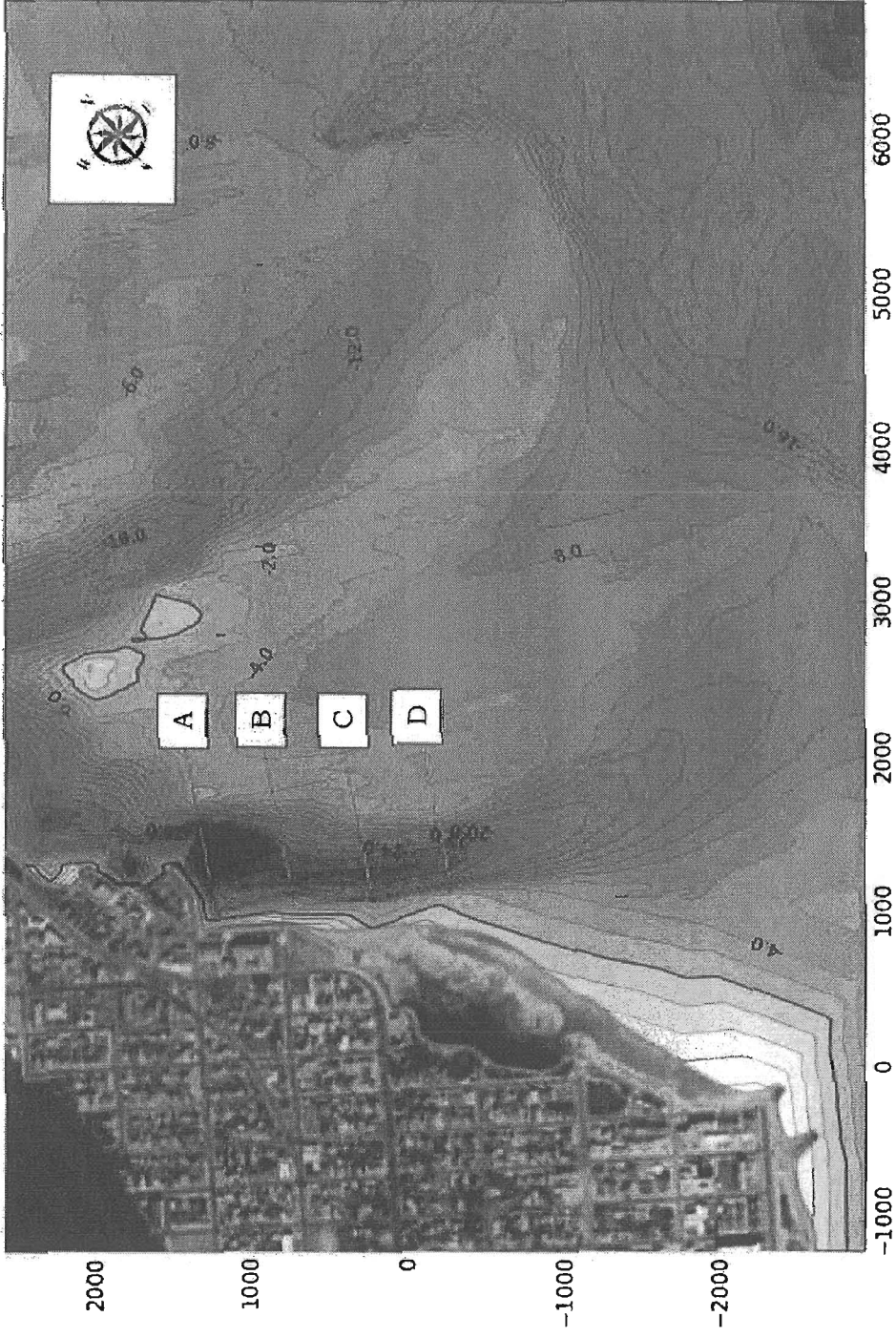


Figure B-7 Corps of Engineers' Survey, August 2014.

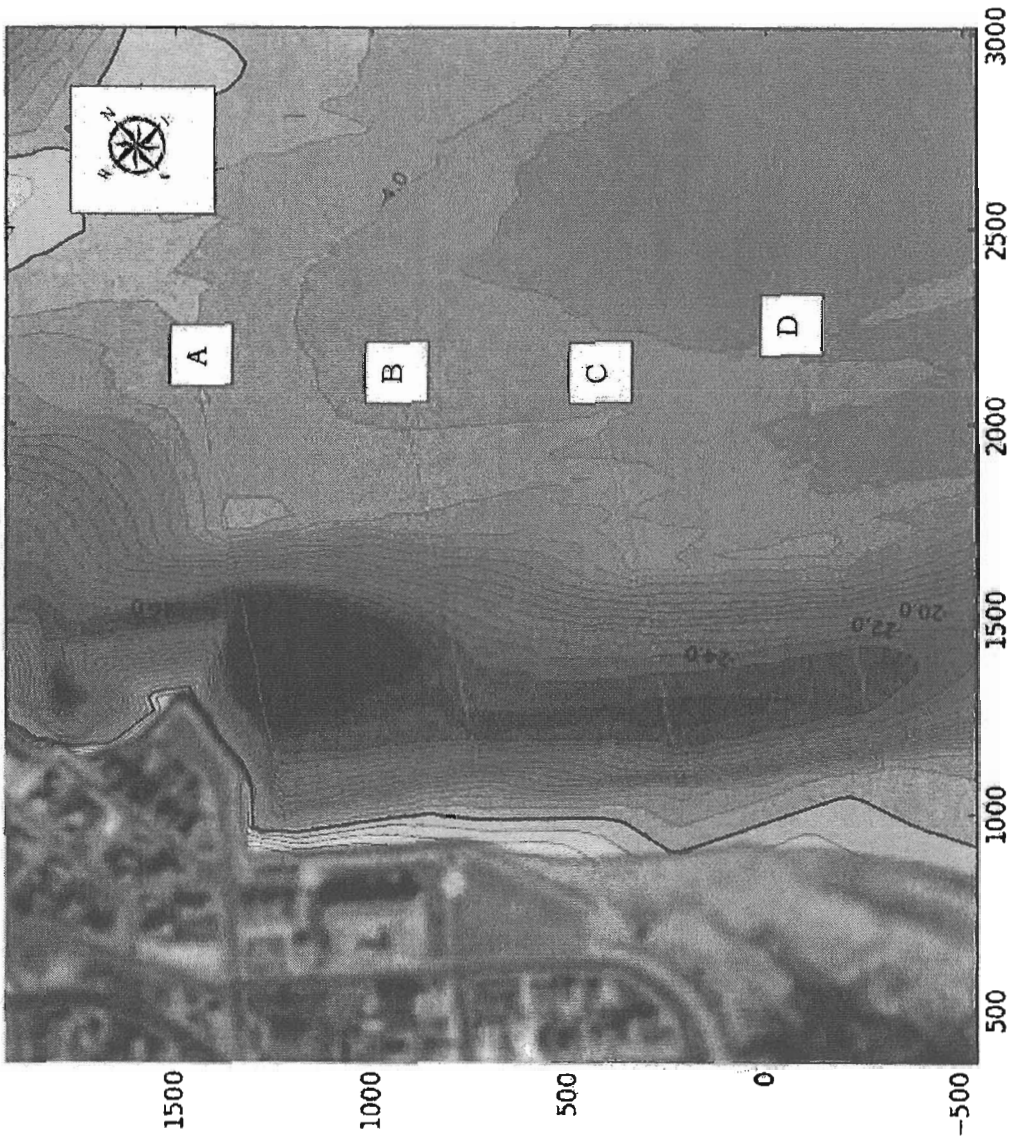


Figure B-8 Detail of Corps of Engineers' Survey, August 2014.

CHANNEL CROSS-SECTIONS - CORPS OF ENGINEERS 2014 SURVEY

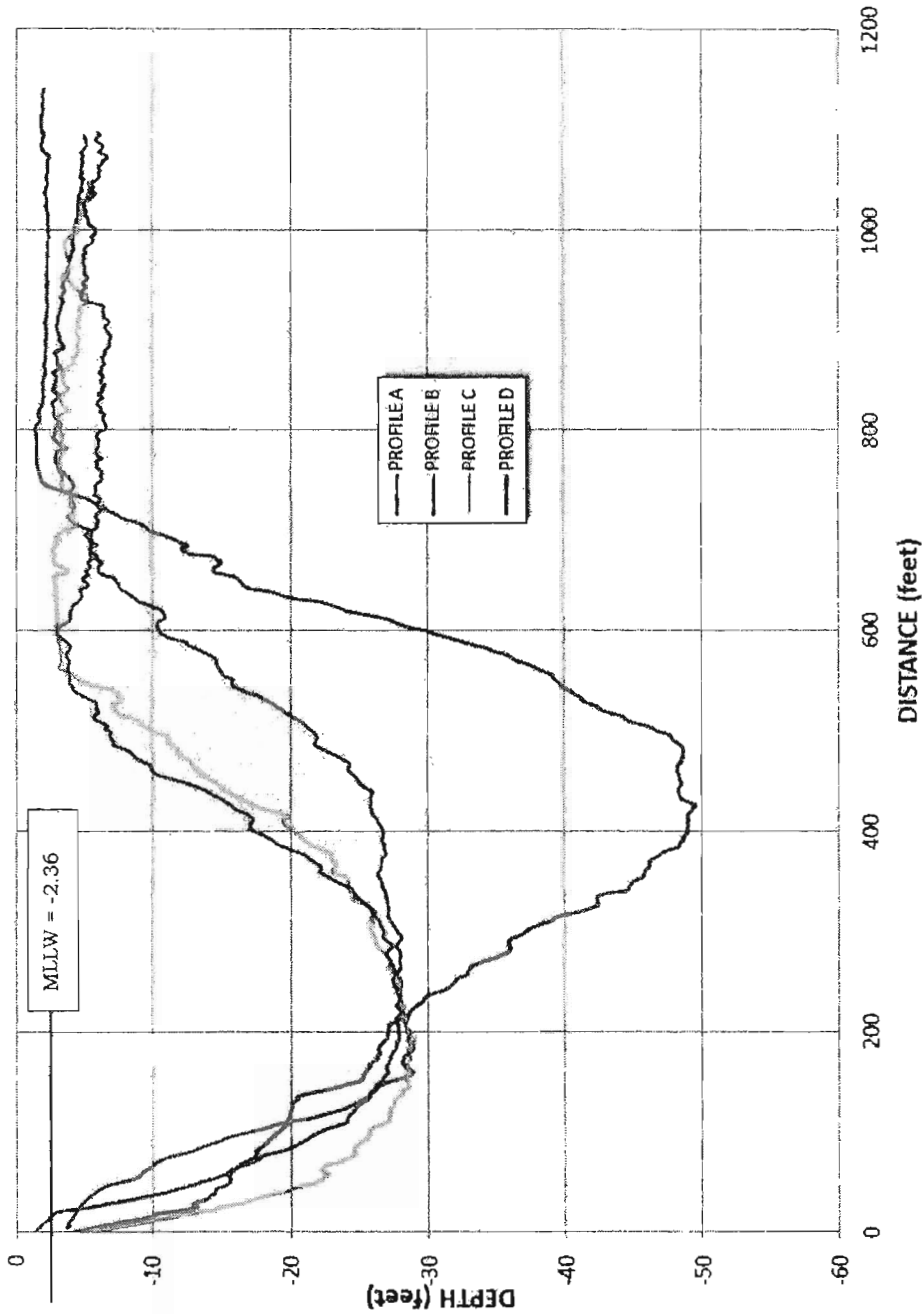


Figure B-9 Corps of Engineers' Profiles, 2014 Survey.

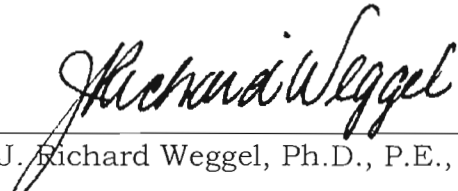
**ADDENDUM TO:
CONDITIONS IN HEREFORD INLET, NORTH WILDWOOD, NJ, LEADING TO
THE DROWNING DEATH OF MR. BRAD SMITH, 27 JULY 2012**

Prepared for
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2900 Fire Road, Suite 200
Egg Harbor Township, New Jersey, 08234
(Dated 19 April 2016)

18 July 2016

Based on my findings in the above referenced report to which this is an addendum, I most strongly recommend that the unprotected Inlet Beach at Hereford Inlet, North Wildwood, NJ, be closed. At the very least, beach users must be kept from getting within 10 feet of the inlet shoreline. The subject beach is that northeast of 2nd Avenue within the confines of the Hereford Inlet. My findings indicate that the inlet beach is occasionally undermined by ebbing tidal currents to produce an unstable slope which can collapse and cause pedestrians walking in shallow water to be swept into the inlet. I believe these conditions led to the drowning death of Mr. Brad Smith on 27 July 2012. These conditions are apparent on bathymetric surveys that show very steep underwater slopes close to the shoreline. Steep underwater slopes can be seen on six bathymetric surveys presented in the above referenced report. Three of the surveys were conducted by the Stockton Coastal Research Center in March 2011, July 2012 and December 2012. Three of the surveys were conducted by the U.S. Army Corps of Engineers in August 2010, December 2012 and August 2014. The fact that steep slopes appear on all six surveys indicates that the conditions are persistent. The dangerous slope conditions are below the water line and are not visible to pedestrians walking on the beach. Furthermore, they are not generally predictable although they probably occur most frequently during ebb current flows in the inlet.

I personally would not walk near the water line on the beach and I advise my friends and loved-ones to stay away from this area. Furthermore, I am bound by the Code of Ethics of the American Society of Civil Engineers to hold paramount the safety, health and welfare of the public. I believe that the cited inlet conditions are a threat to public safety.



J. Richard Weggel, Ph.D., P.E., D.CE

RESUME

JOHN RICHARD WEGGEL, Ph.D., P.E., D.CE

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**Present Position: Samuel S. Baxter Professor Emeritus
Department of Civil, Architectural & Environmental Engineering
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9 January 2014

WEGGEL, John Richard

**Samuel S. Baxter Professor Emeritus
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3142 Chestnut Street
Philadelphia, Pennsylvania 19104**

J. Richard Weggel was born in Philadelphia, Pennsylvania. He attended the Philadelphia Public Schools, graduating from Frankford High School in June 1959. In June 1964, he graduated from the Drexel Institute of Technology with a Bachelor of Science degree in civil engineering. While a student at Drexel, he conducted research sponsored by the National Science Foundation on epoxy resins for structural connections and taught an undergraduate laboratory course in strength of materials. Between June 1964 and September 1964, he taught static mechanics at Drexel. In September 1964, he enrolled as a graduate student in civil engineering (hydraulics) at the University of Illinois at Urbana-Champaign. While a research assistant at Illinois, he conducted research on long wave propagation in open channels, the effect of surface tension on the results of hydraulic model studies and served as Technical Assistant to the Director of the Illinois Water Resources Center. He received a Master of Science degree in September 1966; in 1968, he was awarded the Boris A. Bakhmeteff Research Fellowship in the Mechanics of Fluids to conduct his dissertation research on the impact pressures of breaking water waves. After obtaining a Doctor of Philosophy degree in civil engineering (hydraulics) in October, 1968, he remained at Illinois as an Assistant Professor of Civil Engineering teaching undergraduate courses in hydraulics and hydrology, and graduate courses in hydrology, ground water hydraulics, water resources engineering and ocean engineering. During the summer of 1969, he was a Research Assistant Professor of Soil Physics in Agronomy conducting research on the uptake of water by plant root systems. During the summer of 1970 he was a hydraulic engineer at the Coastal Engineering Research Center primarily involved in developing design criteria for coastal structures. In February 1971, he joined the permanent staff of the Coastal Engineering Research Center as a hydraulic engineer in the Design Branch preparing the internationally recognized "Shore Protection Manual." In March, 1973 he was promoted to Special Assistant to the Commander and Director, CERC, in which capacity he served as a consultant to various Corps of Engineers District and Division offices on complex coastal engineering problems. He served as a member of the Steering Committee of the North Atlantic Division's Deep Port Study Group and as the US Representative to the Second Intentional Waves Commission of the Permanent International Association of Navigation

Congresses (PIANC). In January, 1977, he became Technical Assistant to the Chief, Engineering Development Division, CERC, and developed a research program to investigate the functional performance of weir-jetty sand bypassing systems. Other research included development of a method for generating finite amplitude, shallow water waves that propagate without change in form in a laboratory wave tank.

In July, 1977, he became Chief, Evaluation Branch, Engineering Development Division, CERC, responsible for the \$600,000 research program of that Branch. Research areas included: weir-jetty research; field investigations of an experimental coastal groin at Point Mugu, California; a study of sand accumulation behind an offshore breakwater at Channel Islands Harbor, California; mathematical simulation of shoreline changes induced by man-made structures; evaluation of the functional and structural performance of coastal works; littoral environment data collection and analysis techniques; and the monitoring of existing coastal projects to determine their performance characteristics. He continued his service as consultant to various Corps of Engineer Districts and Divisions on coastal engineering problems.

During his tenure at the Coastal Engineering Research Center, he also held the rank of Professorial Lecturer at the George Washington University teaching courses in coastal and harbor engineering, sediment transport, coastal processes, and coastal structures.

In his present position as Professor of Civil Engineering in the Department of Civil and Architectural Engineering at Drexel University, Dr. Weggel teaches and conducts research in the areas of hydraulics, hydrology, water resources engineering and coastal and port engineering.

EDUCATION:

1. Bachelor of Science in Civil Engineering, June 1964, Drexel Institute of Technology.
2. Master of Science (civil engineering, hydraulics), June 1966, University of Illinois at Urbana-Champaign.
3. Doctor of Philosophy (civil engineering, hydraulics, water resources), October 1968, University of Illinois at Urbana-Champaign.

LICENSES & OTHER TRAINING:

1. Registered Professional Engineer

Illinois (by examination, inactive)
New Jersey
Pennsylvania

2. Academy of Coastal, Ocean, Port and Navigation Engineers (ACOPNE),
Diplomate, Coastal Engineering
3. "Tidal Inlet Hydraulics", Short Course, US Army Coastal Engineering
Research Center, May 10-20, 1971, Washington, DC
4. "Streamfunction Wave Theory", Short Course, University of Florida,
June 18-July 2, 1971, Gainesville, Florida.
5. "Hurricane Storm Surge Prediction and Frequency Analysis", Short
Course, US Army Coastal Engineering Research Center, June 25-30,
1972, Washington, DC
6. "Planning for Offshore Ports", Marine Technology Society, September
10-14, 1973, Washington, DC
7. "Executive Leadership Seminar", US Civil Service Commission, May
11-14, 1975, Fredericksburg, Virginia
8. "Managing Management Time", US Department of Agriculture
Graduate School, September 11-12, 1975, Washington, DC
9. "Management of Research and Development", The George Washington
University, Spring, 1976.
10. "Project Health, Practical Guide to Executive Fitness and Well Being",
Civilian Personnel Office, November 1977, Fort Belvoir, Virginia.
11. "Supervisor Development, Phase I", Civilian Personnel Office,
September, 1977, Fort Belvoir, Virginia.
12. "Supervisor Development, Phase II", Civilian Personnel Office, June,
1978, Fort Belvoir, Virginia.
13. "Theory Z (Management Science)", Institute for Professional
Development, December 10-13, 1978, Arlington, Virginia.
14. "HP 9845 Operation and Programming", Hewlett-Packard Computer
Systems, January, 1981, Rockville, Maryland.

15. "Effective Engineering Management"; University of California at Los Angeles, June 22-27, 1981, Washington, DC

16. "Numerical Calculation of Fluid Flow and Heat Transfer", Drexel University, Continuing Professional Education, February - April, 1984, Philadelphia, PA.

17. "Introduction to Geophysics," G228, Department of Civil & Architectural Engineering, Drexel University - spring 1988

18. "Finite Element Method in Groundwater Flow Modeling" Drexel University – spring 1991

HONORS & AWARDS:

1. William Penn Troth Award, Drexel Institute of Technology, 1964

2. Class of 1916 Award, Drexel Institute of Technology, 1964

3. Institute Day Award, Drexel Institute of Technology, 1963

4. Boris A. Bakhmeteff Fellowship in the Mechanics of Fluids, Humanities Fund, Inc., 1967

5. Outstanding Performance Rating, US Army Corps of Engineers, 1973, 1974, 1975, 1976, 1981, 1982

6. Commanders Award for Engineering Excellence ("Engineer of the Year Award"), US Army Coastal Engineering Research Center, 1982

7. American Society of Civil Engineers, Moffatt & Nichol Harbor and Coastal Engineering Award, 1993

8. Robert G. Quinn Medal for Outstanding Leadership, Drexel University, 20 February 2002

9. Lifetime Achievement Award, College of Engineering, Drexel University, 22 February 2008

10. Induction into Drexel University's College of Engineering Alumni Circle of Distinction, 24 February 2012.

11. Drexel University, Department of Civil, Architectural & Environmental Engineering's Alumni Lecture, May 2012.

12. The Order of the Engineer (inducted 2003)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS & HONORARY SOCIETIES:

1. American Society of Civil Engineers, Fellow, Life Member

* Research Committee, Waterway, Port, Coastal & Ocean Division, ASCE.

- Member, 1975-1978
- Chairman, 1978

* Executive Committee, Waterway, Port, Coastal & Ocean Division, ASCE.

- Member, 1979-1983
- Chairman, 1981-82

* Management Group D,

- Member, 1983-1988
- Chairman, 1986-1987

* Chairman, Organizing Committee, Coastal Structures '79, Specialty Conference.

* Program Chairman, Coastal Structures '83, Specialty Conference.

* Co-chairman, Organizing Committee, Coastal Engineering Practice '97 Specialty Conference

* National Offshore Policy Committee

- Member, 1981-1988

* Committee on TAC Interface with Sections and Branches

- Member, 1988-1992

* Rubble-Mound Structures Committee

- Member, 1990 - present

* Philadelphia Section, ASCE

- Member 1983-present
- Member, Board of Directors, 1984-1993
- Vice President, 1987-88
- President elect, 1988-89

- President, 1989-1990
 - * Water and Environmental Group, Philadelphia Section
 - Member, 1983-present
 - Chairman, 1984-85
 - * Member, Infrastructure Committee, Philadelphia Section, 1984.
2. American Geophysical Union, Member
 3. Permanent International Association of Navigation Congresses,
 - Member.
 - * Second International Waves Commission, PIANC, US Representative
 - * US Representative - Working Group on Sand Bypassing at Inlets on Sandy Coasts (1992 - 1995)
 4. American Shore and Beach Preservation Association, Member
 - * Past Member of Board of Directors, ASBPA
 5. Northeast Shore & Beach Preservation Association, Vice President
 - * Treasurer (2009-present)
 - * Co-chair, Technical Program Committee, Annual Meeting
 - * Program Chairman, Northeast Beaches Conference, 2008
 - * Program Chairman, Northeast Beaches Conference, 2010
 - * Program Chairman, Northeast Beaches Conference, 2013
 6. International Association for Hydraulic Research (IAHR)
 - * Faculty Advisor, Drexel University Student Chapter
 7. Accreditation Board for Engineering & Technology
 - * Accreditation visitor for civil engineering programs (1988 - 1998)
 8. Marine Board, National Research Council, Committee on Beach Nourishment and Protection (1992 - 1995)
 9. Educational Testing Service, Committee to Investigate the Development of a Graduate Record Examination in Engineering (1992 - 1994)
 10. Chi Epsilon
 - Faculty Advisor, Drexel University Chapter (2007-present)

11. Tau Beta Pi
12. Phi Kappa Phi
* Vice President, Drexel Chapter (1992 - 1997)
13. Sigma Xi
14. Abington Township Planning Commission
* Member (June 2013 – present)
- 15 Member, President John Fry's Visiting Board, Drexel University

EMPLOYMENT RECORD:

- * **Samuel S. Baxter Professor Emeritus**, Drexel University, September 2008 to present
- * **Samuel S. Baxter Professor of Civil Engineering**, Drexel University, June 1998 – September 2008
- * **Professor** – Department of Civil, Architectural & Environmental Engineering, Drexel University, 32nd & Chestnut Streets, Philadelphia, PA 19104 – September 1988 to September 2008
- * **Associate Dean for Undergraduate Affairs** – College of Engineering, Drexel University - August 2000 to December 2003
- * **Interim Head, Department of Civil, Architectural & Environmental Engineering**, Drexel University – October 2002 to October 2003
- * **Head, Department of Civil & Architectural Engineering** – July 1988 to July 1991
- * **Associate Professor** – Department of Civil Engineering, Drexel University, 32nd & Chestnut Streets, Philadelphia, PA 19104 – July 1983 to September 1988
- * **Chief, Coastal Structures and Evaluation Branch** - US Army Coastal Engineering Research Center - July 1977 to July 1983.

As Chief of the Coastal Structures and Evaluation Branch, managed the manpower and financial resources to conduct the research and technology transfer program of the branch. Research efforts included studies of weir jetty performance and design, numerical modeling of shore response to coastal structures, coastal data collection methods and interpretation, and evaluation of the performance of existing coastal projects to establish improved design techniques. In addition, the Corps' Monitoring Completed Coastal Projects (MCCP) Program was managed and carried out in the Evaluation Branch. During tenure as Branch Chief, the Evaluation Branch developed into one of the most productive groups in CERC. The branch produced more than 13 Technical Reports, Coastal Engineering Technical Aids, and other publications during 1981. Most reports prepared in the branch were aimed directly at assisting practicing coastal engineers perform their work. In addition, served as a high level consultant to Corps Districts and Divisions; the office of the Chief of Engineers (OCE), the Board of Engineers for Rivers and Harbors

(BERH), and other agencies on complex coastal engineering problems. Consulting efforts included project reviews for OCE and BERH; assistance to the Corps' Savannah District on the design of a weir groin; review of an appeal to the Federal Insurance Administration (FIA) by the State of Alabama; proposed boat basin modifications for the Coast Guard at their Shark River Station, New Jersey; consultation on an erosion problem for the Corps' Middle East Division at the King Abdulaziz Naval Base, Jubail, Saudi Arabia, and preparation of a sediment budget for the Oceanside, California area.

* **Professorial Lecturer** - Department of Civil, Mechanical and Environmental Engineering. The George Washington University - September 1974 to June 1983.

As an adjunct faculty member, taught graduate courses in coastal and harbor engineering, sediment transport, coastal structures, and coastal processes.

* **Technical Assistant to Chief, Engineering Development Division** - US Army Coastal Engineering Research Center - January 1977 to July 1977.

As Technical Assistant to the Chief of the Engineering Development Division, developed a research program for weir jetty research in the Division and initiated its execution; served as a consultant to Corps Districts and Divisions, Office of the Chief of Engineers, the Board of Engineers for Rivers and Harbors, and other agencies. Consulting efforts included work on determining the coastal processes at Ocean Beach, San Francisco, California for the National Park Service and evaluating the potential of using excavation material from the Upper Great Highway as beach nourishment.

* **Special Assistant to the Commander and Director** - US Army Coastal Engineering Research Center - March 1973 to January 1977.

As a staff member of CERC's Executive Office, reviewed reports submitted to CERC by OCE, BERH and Corps Districts and Divisions for technical adequacy and for compliance with Corps policies; served as a consultant to Corps Districts and Divisions including a study resulting in development of computer simulations of wave action on the Savannah River Tide Gates, served as the US Representative to the Second International Waves Commission of the Permanent International Association of Navigation Congresses (PIANC) and was a contributor to the final report of that Commission.

In addition to technical activities, provided staff support to the Commander and Director on the management of CERC including advising him on the Chief of Engineers' Coastal Engineering Research Board's (CERB) activities; arranged meetings, prepared the minutes of CERB meetings, and prepared staff studies for submission to the Director of Civil Works and the Chief of Engineers recommending membership of the CERB; insured that the CERB complied with the newly instituted Federal Advisory Committee Act's provisions; prepared the first 5 year plan for CERC under the newly established Research and Development Office. This plan resulted in restructuring CERC's research program into new technical categories; arranged and conducted the early meetings of the Chief of Engineers' Shoreline Erosion Advisory Panel (SEAP) initiating work under Section 54, the Shoreline Erosion Control Demonstration Act.

*** Hydraulic Engineer - US Army Coastal Engineering Research Center** - February 1971 to March 1973.

As an engineer in the Design Branch, reviewed recent research developments to determine their applicability to the solution of Corps of Engineers problems related to coastal engineering design; performed work leading to the development of design criteria for coastal and marine structures to be included in the Shore Protection Manual (SPM) and served as a technical editor for this internationally recognized coastal design manual; developed design criteria for determining the maximum breaking wave that a given coastal structure can experience. These criteria have been adopted by the Nuclear Regulatory Commission for the design of coastal nuclear power plant facilities; reviewed research proposals for possible funding by the Corps and served as a consultant to Corps Districts and Divisions on coastal engineering problems and as a member of the Steering Committee of the Corps' North Atlantic Division Deep Draft Port Study.

*** Assistant Professor - Department of Civil Engineering, University of Illinois** - September 1968 to February 1971.

Taught undergraduate courses in hydrology and hydraulic engineering, and graduate courses in hydrology, groundwater hydraulics, water waves and ocean engineering; research activities included studies of wave forces on coastal structures, hydraulic modeling techniques and water waves. Other activities included various faculty committees.

*** Assistant Professor of Soil Physics in Agronomy - Department of Agronomy, University of Illinois** - June 1969 to September 1969.

Conducted research on the uptake of water by plant root systems including the development of gamma radiation techniques for measuring soil water content.

*** Research Assistant - Department of Civil Engineering, University of Illinois - September 1964 to September 1968.**

Conducted research on computer solutions of the one dimensional equations for flow in river channels (long waves in shallow water); effect of viscosity and surface tension on the results of hydraulic model studies, and the study of wave impact pressures on coastal structures.

*** Instructor - Department of Civil Engineering, Drexel Institute of Technology** - June 1964 to September 1964.

Taught undergraduate static mechanics and strength of materials laboratory courses; conducted research on the use of epoxy resin adhesives for structural connections.

COURSES TAUGHT:

Undergraduate:

- E224 Nearshore Oceanography & Coastal Engineering
- E254 Introduction to Hydrology
- E255 Groundwater Hydrology
- E256 Water Resources Engineering
- CAEE201 Introduction to Infrastructure Engineering
- CAEE210 Engineering Measurements I
- CIVE320 Introduction to Fluid Flow
- CIVE330 Hydraulics I
- CIVE430 Introduction to Hydrology
- CIVE431 Groundwater Hydrology
- ENGR100 University Seminar (Freshmen)
- UNIV101 The Drexel Experience (Freshmen)
- UNIV241 Great Works Symposium – The Mississippi River
- E⁴ (Enhanced Engineering Education Experience Program)
 - Mathematical & Scientific Fundamentals of
 - Engineering I (Statics & Dynamics)
 - ENGR131 Freshman Design
- CIVE240 Engineering Economic Analysis/Decision Making

Graduate:

- CIVE561 Introduction to Hydrology

CIVE660 Hydrology - Streamflow
CIVE661 Hydrology - Groundwater
CIVE560 Introduction to Coastal & Port Engineering
CIVE790 Coastal Processes & Shoreline Erosion
CIVE790 Coastal & Port Structures
CIVE664 Open Channel Flow
CIVE662 Hydromechanics I
CIVE663 Hydromechanics II

STUDENTS SUPERVISED:

Doctoral Students:

Scott L. Douglass, Ph.D., "The Influence of Wind on Nearshore Breaking Waves," March 1989
Rifat N. Rustom, Ph.D., "Evaluation of Geosynthetic Erosion Control Systems on Steep Slopes," June 1993
Karen Ann Riley, Ph.D. – "A Model for Nitrate Mass in Runoff during Single Storm Events," June 2002
Muhammad Khan, Ph.D. – "Scaling Relations from Scale Model Experiments on Equilibrium Accretionary Beach Profiles," December 2002
Mehmet Hınıs, Ph.D – "Cnoidal and Sinusoidal Wave Reflection from a Laboratory Sand Beach," March 2003

Masters Students

Sherrerd L. Steele, M.S., "A Sediment Budget for Ocean City, New Jersey"
Edward Doheny, M.S., "Application to Townsend's Inlet of a Numerical Model Using the Characteristic Equations of Open Channel Flow"
Rhomios Ram, M.S., "Evaluation of a Model Breakwater's Stability Using Acoustic Emissions"
Juan Carlos Escajadillo, "The Performance of Three Types of Groins in New Jersey"
Robert Webb, "New Jersey's Coastal Groins - Dimensional Considerations"
Matthew Moreale (University of Pennsylvania), "A Sediment Budget Analysis for the Beachfront at Ocean City, New Jersey"
Mohamed Dabees, "Shoreline Change Modeling and Application to Sea Isle City, New Jersey"
Maria Laura Beninati, "Modeling Chlorine Residuals in Water Distribution Systems"
Mehmet Hınıs, "Procedure for Calculating Beach Dune Growth Rates"

Gwyneth Krimmel, "Laboratory Experiments on First Flush Pollution
Runoff"

Brian Marengo – "Numerical modeling of Schuylkill River near its
Confluence with the Wissahickon Creek"

Jacob Dortch – "Hanging Bag Test for Geotextile Bags"

PUBLICATIONS:

1. Weggel, J. Richard, "Epoxy Resins for Structural Connections", *Drexel Technical Journal*, Drexel Institute of Technology, October, 1964.
2. Maxwell, W.H.C. & J. R. Weggel, "Surface Tension in Froude Models", *Journal of the Hydraulics Division*, ASCE, #6482, March, 1969.
3. Weggel, J. Richard, "The Impact Pressures of Breaking Water Waves", Ph.D. Dissertation, Department of Civil Engineering, University of Illinois at Urbana-Champaign, October, 1968.
4. Weggel, J. Richard & W.H.C. Maxwell, "A Numerical Model for Wave Pressure Distributions", *Journal of the Waterways, Harbors & Coastal Engineering Division*, ASCE, #7467, August, 1970.
5. Weggel, J. Richard & W.H.C. Maxwell, "Experimental Study of Wave Impact Pressures", Proceedings of the Second Annual Offshore Technology Conference, OTC 1244, April 23-24, 1970, Houston, Texas.
6. Weggel, J. Richard, Discussion of "Shock Pressure on Coastal Structures", by Adel M. Kamel, *Journal of the Waterways, Harbors & Coastal Engineering Division*, ASCE, WW3, pp. 584-588.
7. Teleki, P.G. & J.R. Weggel, Discussion of "Skewness as an Environmental Indicator in the Solani River System, Roorkee, India", by A.K. Awasthi, *Sedimentary Geology*.
8. Weggel, J. Richard, "Maximum Breaker Height", *Journal of the Waterways, Harbors & Coastal Engineering Division*, ASCE, #9384, November, 1972.
9. Weggel, J. Richard, "Maximum Breaker Height for Design", Proceedings, 13th International Conference on Coastal Engineering, Vancouver, B.C., 1972.
10. Weggel, J. Richard, "An Introduction to Oceanic Water Motions and their Relation to Sediment Transport", in *Processes and Patterns of Sediment Dispersal on the Continental Shelf*, Dowd, Hutchinson and Ross, Publishers, Stroudsburg, PA.
11. Weggel, J. Richard, "A Wave Overtopping Equation", Proceedings 15th International Conference on Coastal Engineering, Honolulu, Hawaii, July, 1976.

12. Weggel, J.R., Roberts, & J. Hagar, "Wave Action on the Savannah Tide Gates", Proceedings, Coastal Structures '79 Conference, Alexandria, VA. March 14-16, 1979.
13. Weggel, J. Richard, "A Method for Estimating Long Term Erosion Rates from a Long Term Rise in Water Level", CETA 79-2, Coastal Engineering Research Center, Fort Belvoir, VA., 1979.
14. Weggel, J.R. & R.M. Sorensen, "Surging in the Shark River Boat Basin", Proceedings, Ports '80 Conference, Norfolk, VA. May 19-20, 1980.
15. Schneider, C. & J.R. Weggel, "Visually Observed Wave Data at Point, Mugu California", Proceedings, 17th International Conference on Coastal Engineering, Sydney, Australia, 1980.
16. Weggel, J. Richard, "Wave Loading on Vertical Sheet-pile Groins and Jetties", CETA 81-1, Coastal Engineering Research Center, Fort Belvoir, VA. 1981.
17. Weggel, J. Richard, "Weir Sand Bypassing Systems", Special Report, SR-8, Coastal Engineering Research Center, Fort Belvoir, VA. 1981.
18. Weggel, J. Richard, "Some Observations on the Economics of Over-designing Rubble-Mound Structures with Concrete Armor", CETA 81-7, Coastal Engineering Research Center, Fort Belvoir, VA. 1981.
19. Watts, G.M, C.H. Fisher, N.E. Parker & J.R. Weggel (1981) "Coastal Erosion Caused by Harbor Works and Corrective Measures," Section II, Subject 5, XXVth International Congress, PIANC, Edinburgh, Scotland, 1981.
20. Walton, T.L., W. Birkemeier, & J.R. Weggel, "Hand-held Calculator Algorithms for Coastal Engineering", CETA 82-1, Coastal Engineering Research Center, Fort Belvoir, VA. 1982.
21. Walton, T.L., & J.R. Weggel, "Stability of Rubble-Mound Breakwaters", *Journal of the Waterway, Port, Coastal & Ocean Division*, ASCE, WW3, August, 1981, pp. 195.
22. Weggel, J.R. & T.L. Walton, "Coastal Structures as Sediment Traps", unpublished CERC report, Coastal Engineering Research Center, Fort Belvoir, VA, 1981.

23. Schneider, C. & J.R. Weggel, "Littoral Environment Observation (LEO) Data Summaries, Northern California, 1968-1978," Miscellaneous Paper 82-6, Coastal Engineering Research Center, Fort Belvoir, VA, August 1982.
24. Weggel, J.R. & P. Vitale, "Sand Transport Over Weir Jetties and Low Groins", in *Physical Modeling in Coastal Engineering*, R.A. Dalrymple, editor, International Conference on Physical Modeling, University of Delaware, Newark, Delaware, August, 1981, A.A. Balkema, Rotterdam/Boston, 1985.
25. Weggel, J. Richard, "Analysis Method for Studying Sedimentation Patterns", *Journal of the Waterway, Port, Coastal & Ocean Division*, ASCE, WW2, May 1983.
26. Walton, T.L. and J.R. Weggel, "Computational Algorithm for Longshore Energy Flux Incorporating Friction", Proceedings of the 18th International Conference on Coastal Engineering, Cape Town, South Africa, November, 1982.
27. Weggel, J. Richard, "The Design of Weir Sand By-Passing Systems", Proceedings of the Coastal Structures '83 Conference, Arlington, Virginia, 9-11 March 1983.
28. Weggel, J. Richard, "Sediment Budget Calculations, Oceanside, California", Miscellaneous Paper CERC-83-7, Coastal Engineering Research Center, Vicksburg, Mississippi, December, 1983.
29. Sorensen, R.M. and J.R. Weggel, "Development of Ship Wave Design Information," Proceedings of the 18th International Conference on Coastal Engineering, Houston, Texas, September, 1984.
30. Sorensen, R.M. and J.R. Weggel, "Evaluation of Functional Behavior of Shore Structures and Related Shoreline Processes in Support of Planned 1985 Beach Nourishment at Atlantic City," Proceedings, Ninth Annual Conference of the Coastal Society, *Gambling with the Shore*, Atlantic City, NJ, October 14-17, 1984.
31. Weggel, J.R. and N. Rajendran, "Optimization of a Shore Protection Scheme for the West Coast of India," Proceedings of the International Conference on Ocean Space Utilization, Ocean Space '85, Tokyo, Japan, June 1985, pp. 237-248.

32. Weggel, J. Richard, in *The Design and Construction of Mounds for Breakwaters and Coastal Protection*, P. Bruun, editor, Elsevier/North Holland Publishing Co., New York, NY, 1985.
33. Sorensen, R.M. and J.R. Weggel, "Evaluation of Beach Behavior and Coastal Structure Effect at Atlantic City, NJ," Fritz Engineering Lab Report No. 200.85.811.1, Lehigh University, Bethlehem, PA, April 1985.
34. Weggel, J.R. and S.L. Douglass, "An Interactive BASIC Program to Calculate Shallow Water, Limited Fetch Wave Conditions," Hydraulics and Hydrology Laboratory Report 85-1, Drexel University, Philadelphia, PA, September 1985.
35. Weggel, J. Richard, "Economics of Beach Nourishment Under a Scenario of Rising Sea Level," *Journal of Waterway, Port, Coastal and Ocean Engineering*, ASCE Vol. 112, No. 3, May 1986.
36. Weggel, J.R. and R.M. Sorensen, "Ship Wave Prediction for Port and Channel Design," Proceedings, ASCE Specialty Conference, Ports '85, Oakland, CA, May, 1986.
37. Weggel, J.R. and S.L. Douglass, "Synthetic Generation of Longshore Sand Transport Data and Simulation of Sand Bypassing at Indian River Inlet, Delaware," Hydraulics and Hydrology Laboratory Report 86-1, Drexel University, Philadelphia, PA, May 1986.
38. Douglass, S.L. and J.R. Weggel, "Estimation and Synthetic Generation of Longshore Sand Transport Data and Simulation of Sand Bypassing at Manasquan Inlet, New Jersey," Hydraulics and Hydrology Laboratory Report 86-2, Drexel University, Philadelphia, PA, September 1986.
39. Douglass, S.L. and J.R. Weggel, "Performance of a Perched Beach at Slaughter Beach, Delaware," Hydraulics and Hydrology Laboratory Report 87-1, Drexel University, Philadelphia, PA, January 1987.
40. Sorensen, R.M. and J.R. Weggel, "Beach Behavior and Effect of Coastal Structures, Bradley Beach, New Jersey," Report IHL-122-87, Imbt Hydraulics Laboratory, Lehigh University, Bethlehem, PA, February 1987.
41. Weggel, J.R., J.C. Escajadillo and T. Ting, "A Comparison of the Performance of Three Types of Groins," Proceedings, Second

International Conference on Coastal and Port Engineering in Developing Countries, Beijing, PRC, September 1987.

42. Weggel, J.R., M. Perlin, "Statistical Description of Longshore Transport Environment," *Journal of Waterway, Port, Coastal and Ocean Engineering*, ASCE, Vol. 114, No. 2, March 1988.

43. Weggel, J.R., S.L. Douglass & J. Tunnell, "Sand-Bypassing Simulation Using Synthetic Longshore Transport Data," *Journal of Waterway, Port, Coastal and Ocean Engineering*, ASCE, Vol. 114, No. 2, March 1988.

44. Weggel, J.R., S. Brown, J.C. Escajadillo, P. Breen & E.L. Doheny, "The Cost of Defending Developed Shorelines along Sheltered Waters of the United States from a Two Meter Rise in Mean Sea Level," prepared for the U.S. Environmental Protection Agency, Drexel University Coastal Engineering and Geology Program Report, June 1988.

45. Weggel, J.R., S.L. Douglass & R.M. Sorensen, "An Engineering Study of Ocean City's Beaches, New Jersey, USA", Chapter 213, Proceedings, 21st International Conference on Coastal Engineering, Costa del Sol-Malaga, Spain, 20-25 June 1988, pp. 2867-2881.

46. Sorensen, R.M., S.L. Douglass & J.R. Weggel, "Results from the Atlantic City, NJ Beach Nourishment Monitoring Program," Chapter 2806, Proceedings, 21st International Conference on Coastal Engineering, Costa del Sol-Malaga, Spain, 20-25 June 1988, pp. 2806-2817.

47. Douglass, S.L & J.R. Weggel, "Laboratory Experiments on the Influence of Wind on Nearshore Wave Breaking," Chapter 46, Proceedings, 21st International Conference on Coastal Engineering, Costa del Sol-Malaga, Spain, 20-25 June 1988, pp. 632-643.

48. Weggel, J.R. "Seawalls: The Need for Research, Dimensional Considerations and a Suggested Classification," *Journal of Coastal Research*, Special Issue #4, The Effect of Seawalls on the Beach, N. Kraus & O. Pilkey, editors, September 1988

49. Weggel, J.R. & E.L. Doheny "The Cost of Protecting Sheltered Shorelines of the United States from a 2-Meter Rise in Mean Sea Level," Proceedings, Clean Energy Conference, Miami, FL, December 1989.

50. Weggel, J.R. & S.L. Farrell "The Effect of a Shore-Parallel Offshore Breakwater on the Beaches at Ocean City, NJ," Proceedings of the 22nd International Conference on Coastal Engineering, Delft, the Netherlands, July, 1990.
51. Doheny, E.J. & J.R. Weggel "Application to Townsends Inlet of a Numerical Model Using the Characteristic Equations of Open Channel Flow," Final Report, New Jersey Sea Grant Project R/S-9, Department of Civil and Architectural Engineering, Hydraulics and Hydrology Laboratory Report 90-1, September 1990.
52. Titus, J.G., R.A. Park, S.P. Leatherman, J.R. Weggel, M.S. Greene, P.W. Mausel, S. Brown, C. Gaunt, M. Trehan, and G. Yohe "Greenhouse Effect and Sea Level Rise: Potential Loss of Land and the Cost of Holding Back the Sea," *Coastal Management*, 1991.
53. Martin, J.P., J.R. Weggel, M. Bruno and S. Halsey "The Use of High Fly Ash Concrete for Marine Structures," Proceedings, 9th International Coal Ash Utilization Symposium, January 22-25, 1991, Orlando, FL
54. Weggel, J.R. & R.M. Sorensen "Performance of the 1986 Atlantic City, New Jersey, Beach Nourishment Project," *Shore & Beach*, Journal of the American Shore and Beach Preservation Association, Vol. 59, No. 3, July 1991
55. Weggel, J.R. & R.N. Rustom, "Soil Erosion by Rainfall and Runoff - State of the Art," Proceedings, 5th Geosynthetic Research Institute Seminar, Drexel University, Philadelphia, PA, December 12-13, 1991.
56. Weggel, J.R. & A. Gontar, "A Thickness Equation for Nonwoven, Needle-punched Geotextiles Under Normal Loading," *Geotechnical Testing Journal*, ASTM, December 1992, pp. 404-408.
57. Sorensen, R.M. & J.R. Weggel "Field Monitoring of a Modular Detached Breakwater System," Proceedings, Coastal Engineering Practice '92, ASCE, Long Beach, CA, 9-11 March 1992, pp. 189-204.
58. Weggel, J.R. & R. Rustom, "Soil Erosion by and Rainfall and Runoff - State of the Art," *Geotextiles Geomembranes*, Vol. 11, No. 4, 1992, pp. 645-666.
59. Rustom, R.N. & J.R. Weggel, "A Study of Erosion Control Systems: Experimental Apparatus," Proceedings, International Erosion Control Association Conference, Indianapolis, IN, February 1993.

60. Rustom, R.N. & J.R. Weggel, "A Study of Erosion Control Systems: Experimental Results," Proceedings, International Erosion Control Association Conference, Indianapolis, IN, February 1993.
61. Weggel, J.R. & A. Gontar, "In-Plane Air Flow Through Needle-punched, Nonwoven Geotextiles Under Normal Loading," *Geotechnical Testing Journal*, ASTM, June 1993, pp. 207-215.
62. Doheny, E.L. & J.R. Weggel, "The Cost of Defending Long Beach Island, NJ, from a Two Meter Rise in Mean Sea Level," Proceedings, The Hilton Head Island, South Carolina, USA, International Coastal Symposium, June 6-9, 1993, Vol. II, pp. 374-383.
63. Rustom, R.N. & J.R. Weggel, "A Laboratory Investigation of the Role of Geosynthetics in Interill Soil Erosion and Sediment Control," *Geotechnical Fabric Reports*, April, 1993
64. Weggel, J.R., W.F. Baird, B. Edge, O.T. Magoon, E. Mansard, D.D. Treadwell & R.W. Whalin, "Sines Breakwater Revisited - Repair and Reconstruction," Proceedings, ASCE Specialty Conference, Case Histories for the Design, Construction, and Maintenance of Rubble-Mound Structures, Eureka CA, May, 1994.
65. Weggel, J.R. et al. (ASCE Rubble Mound Structures Committee) "Rehabilitation of the West Breakwater - Port of Sines," Proceedings, 24th International Conference on Coastal Engineering, Kobe, Japan, October 1994.
66. Weggel, J.R. "A Primer on Monitoring Beach Nourishment Projects." *Shore & Beach*, Journal of the American Shore and Beach Preservation Association, Vol. 63, No. 3, July 1995.
67. Weggel, J.R., M. Morreale & R. Giegengack, "The Ocean City, New Jersey, Beach Nourishment Project: Monitoring its Early Performance," *Shore & Beach*, Journal of the American Shore and Beach Preservation Association, Vol. 63, No. 3, July 1995.
68. Webb, R. & J.R. Weggel, "Design of Groin Fields - Dimensional Considerations," Proceedings, Conference on Coastal and Port Engineering in Developing Countries (COPEDEC) , Rio de Janeiro, September 1995.

69. Seymour, R.J., N.E. Bockstael, T.J. Campbell, R.G. Dean, P.D. Komar, O.H. Pilkey, Jr., A.P. Pratt, M.R. Snow, R.F. VanDolah, J.R. Weggel & R.L. Wiegel, *Beach Nourishment and Protection*, National Research Council, Marine Board, National Academy Press, 2101 Constitution Avenue NW, Washington, DC, December 1995.
70. Weggel, J.R. discussion of "Breaking Wave Loads on Vertical Walls Suspended above Mean Sea Level" by Chan, Cheong & Gin, *Journal of Waterway, Port, Coastal and Ocean Engineering*, ASCE, May 1997.
71. Weggel, J.R. "Maximum Daily Wind Gusts Related to Mean Daily Wind Speed," *Journal of Structural Engineering*, ASCE, Vol. 125, No. 4, April 1999.
72. Weggel, J.R. "Geosynthetic Erosion Control Systems for the 21st Century: New Solutions to Old Problems," *Geosynthetics in the Future: Year 2000 and Beyond*, Proceedings of the 13th GRI Conference, edited by R.M. Koerner, G.R. Koerner, Y.G. Hsuan & M.V. Ashley, December 1999.
73. Weggel, J.R. & B. Marengo (1999) "A Schuylkill River Model for the Vicinity of the Queen Lane Water Intake and the Wissahickon Creek, Philadelphia, PA" prepared for the City of Philadelphia Water Department by Drexel University, Department of Civil & Architectural Engineering, 30 June 1999.
74. Valentine, A., V.M. Arms & J.R. Weggel, "Assessing Innovative, Project-Based Learning in Drexel's Freshman Core Curriculum," Proceedings of the 2001 ASEE Annual Conference & Exposition, Albuquerque, NM, 24-27 June 2001.
75. Weggel, J. Richard (2004) "Visibility over Shorefront Sand Dunes: Maintaining an 'Ocean View,'" *Shore & Beach*, Journal of the American Shore and Beach Preservation Association, Vol. 72, No. 4, Fall 2004, pp 3-4.
76. Weggel, J. Richard (2005) "On the Stability of Shore-Parallel Geotextile Tubes for Shore Protection," Proceedings, ASCE Geo-Frontiers Conference, Austin, TX, 26 January 2005.
77. Weggel, J. Richard & Joseph Lomax (2005) "Predicting Coastal Sand Dune Growth Rates at the Wildwood Convention and Civic Center, Wildwood, NJ," Proceedings, ASCE Solutions to Coastal Disasters Conference, Charleston, SC, 8-11 May 2005.

78. Weggel, J.R. & J. Lesnick "Did this Seawall Cause Erosion, *Shore & Beach, Journal of the American Shore & Beach Preservation Association*, Vol. 74, No. 3, Summer 2008, pp24-25.
79. Weggel, J.R. & D.C Weggel (2006) "Development of a Coastal Sand Dune Management Program," 7th International Conference HydroScience and Engineering, Drexel University, Philadelphia, PA, 10-14 September 2006.
80. Weggel, J.R. & R.M. Koerner (2007) Floating (Geogrid Supported) Geomembrane Megabags for Emergency Water Supply," GRI-20 Conference, Geosynthetics 2007, Washington, DC, 16-19 January 2007.
81. Weggel, J.R, J.K. Walz, J. Lomax & M. Sray (2007) "Using a Global Positioning System to Measure Tidal Currents in Absecon Inlet, Atlantic City, NJ," *Journal of Surveying Engineering*, ASCE, November 2007.
82. Ward, N.D., J.A. Gebert & J.R. Weggel (2008) "A Hydraulic Study of the Chesapeake and Delaware Canal," *Journal of Waterway, Port, Coastal & Ocean Engineering*, ASCE.
83. Weggel, J. Richard, "Wave and Current Loading on Geosynthetic Fish Pens and Cages," (2008) GRI-21 Conference Proceedings, Agriculture & Aquaculture, GeoAmericas 2008, Cancun, Mexico, 2-5 March 2008.
84. Weggel, J.R., J. Mitchell & C. Haas, (2008) "Two Introductory Civil, Architectural and Environmental Engineering Courses," ASEE Conference, Pittsburgh, PA, June 2008.
85. Weggel, J.R (2009) "Development of a Salt Marsh at Holt's Landing State Park, Delaware," presented at the Northeast Shore and Beach Preservation Association Meeting, Woods Hole, MA, 21-23 September 2009 (abstract only)
86. Weggel, J.R., J. Dortch & D. Gaffney, (2010) "Analysis of fluid discharge from a hanging geotextile bag," *Geotextiles & Geomembranes*, Vol. 29, pp 65-73.
87. Weggel, J.R., J. Dortch & V.Z. Merida (2011) "Experiments with water and slurries in hanging geotextile bags: A further appraisal," *Geotextiles & Geomembranes*, Vol. 29, (2011) pp 502-513.
88. Weggel, J.R. (2011) "Are Floods on the Delaware River Getting Worse?" *Journal of Hydrologic Engineering*, ASCE, March 2011

89. Weggel, J. R. (2011) "The Impact of Opening an Inlet in the Delaware Bay at Norbury's Landing, NJ," *Journal of Coastal Research*, March 2011.
90. Weggel, J. R. & N. D. Ward (2012) "A model for filter cake formation on geotextiles: Theory," *Geotextiles & Geomembranes*, Vol. 31, (2012) pp 51-61.
91. Weggel, J. R. & J. Dortch (2012) "A model for filter cake formation on geotextiles: Experiments," *Geotextiles & Geomembranes*, Vol. 31, (2012) pp 62-68.
92. Weggel, J.R., C.M. Benedict & A.M. Mouradian (2011) "Beach Replenishment for Amtrak's Niantic River Bridge Replacement," *GeoStrata*, ASCE Geo Institute, Nov.-Dec. 2011.
93. Weggel, J.R. & N.D. Ward (2013) "The Mechanics of Filter Cake Formation on a Geotextile," Proceedings of the Geosynthetics 2013 Conference, Long Beach, CA, 1-4 April 2013.
94. Weggel, J.R. & R.N. Rustom (2014) "An Analogy for the Overland Flow Hydrograph: Filling and Draining a Permeable Bag," *Journal of Hydrological Engineering*, ASCE, Vol. 19, No. 1, January 2014.
95. Weggel, J.R., P. Gallagher & Y. Lin (201x) "Transport of a Dilute Aqueous Suspension of Colloidal Silica through a Porous Medium," in preparation.

CONSULTING ACTIVITIES:

1. US Army Engineer District, Los Angeles - Oceanside, California - preparation of sediment budget for a shoreline erosion control study and sand-bypassing study.
2. National Park Service & US Army Engineer District, San Francisco - Ocean Beach, San Francisco, California - shoreline erosion control project, determination of local coastal processes and evaluation of the suitability of excavation materials for use as beach fill.
3. US Army Engineer District, Savannah - Savannah River Tide Gates - evaluation of the dynamics of tide gates under the action of wind generated waves and establishment of gate operating procedures for periods of predicted high waves.
4. US Coast Guard - Shark River Boat Basin, Shark River, New Jersey - hydraulic model study of wave induced agitation in Coast Guard boat basin and recommendations for basin modifications.
5. US Army Engineer District, Savannah - Tybee Island, Georgia - design of modifications to a terminal groin at the northern terminus of the Tybee Island beach fill project, functional design of a weir/groin system and determination of wave loading on a concrete sheet-pile groin at the southern terminus of the project.
6. US Army Engineer District, Los Angeles - Ventura Harbor, California - evaluation of visual wave observation data to determine coastal processes at Ventura Harbor.
7. Board of Engineers for Rivers and Harbors, Corps of Engineers - Mill Cove, Jacksonville Harbor, Florida - develop methodology for data analysis to study shoaling patterns in Mill Cove.
8. Organization of American States - Argentina - present lectures on coastal structure design at Argentine Naval Hydrographic Office and consult on coastal problems at Mar del Plata, Argentina.
9. US Army Engineer District, Buffalo - Vermilion Harbor, Ohio - consultation on effect of harbor entrance breakwater on sand distribution along adjacent beaches and possible remedial measures.

10. US Army Engineer District, Buffalo - Lakeview Park, Lorain, Ohio - consultation on the development of a monitoring program to evaluate the performance of three offshore breakwaters as shore protection.
11. US Army Engineer District, Philadelphia, and State of New Jersey - consultation on plans to nourish beach at north end of Ocean City, New Jersey and review of plans by the State of New Jersey to construct groins to stabilize fill.
12. US Army Engineer District, Chicago - Racine Harbor, Wisconsin - consultation on a sedimentation problem at municipal small boat launching facility.
13. US Army Engineer District, New York - Lentz Marina, Keansburg, New Jersey - determination of causes of shoaling in marina vis-à-vis operation of a tidal flood gates.
14. Chief of Engineers, US Army Corps of Engineers - Loe's Highpoint Resort, Lake Texoma, Dennison, Texas - evaluate the feasibility of using a floating breakwater to alleviate wave problems in a marina.
15. US Army Engineer District, Charleston - Murrells and Little River Inlets, South Carolina - development of project monitoring programs to evaluate project effects on adjacent shorelines and performance of rubble-mound jetties.
16. US Army Engineer Division, New England - Popham Beach, Maine - evaluation of permit application for local shore protection.
17. Federal Emergency Management Agency - review of the methodology for adding wave elevations to coastal storm flood elevations.
18. Federal Emergency Management Agency - review of an appeal by the State of Alabama to the FIA of wave elevations for coastal flood hazard maps.
19. Department of Energy - consultation on the scope of work and model test program for shelf-mounted tower and heat exchangers for the Offshore Thermal Energy Conversion (OTEC) project.
20. Department of Justice - US vs. State of California - expert witness testimony before a Special Master of the US Supreme Court on the effect of coastal structures on the shoreline.

21. State of New Jersey - coastal processes study of Atlantic City, New Jersey, in preparation for a beach nourishment project which included an evaluation of the suitability of sand from various alternative sources.
22. Hydro Research Science, Inc. - consultation on model test results of protective structures proposed to encircle piers of the Sunshine Skyway Bridge, Tampa, Florida.
23. Hydro Research Science, Inc. - consultation on model testing program to study possible breaking wave impact forces on the Offshore Thermal Energy Conversion (OTEC) Land Based Containment Structure, Kahe, Hawaii. Tests also considered the effect of the LBCS on local surfing conditions and on the littoral processes along nearby beaches.
24. City of Ocean City, NJ - consultation on the effects of a proposed shore protection structure on flooding and erosion of adjacent property.
25. Hidroservice S.A. (Brazil) - study of sedimentation processes at the entrance to the Rio Sergipe at Aracaju, Sergipe State, Brazil, for navigation channel maintenance and sand bypassing and to preclude erosion damage to updrift and downdrift recreation beaches.
26. Township of Egg Harbor, NJ - consultation on the wave environment and the wave forces on a timber bulkhead breakwater at the site of a proposed marina inside of Great Egg Harbor Inlet.
27. University of Texas at Austin - State of Texas - review proposal to reconstruct and modify Rollover Fish Pass, Gilchrist, TX, and determine the inlet's role in causing local beach erosion and sedimentation within the Gulf Intracoastal Waterway. Evaluate the feasibility of reopening and maintaining the Corpus Christi Fish Pass.
28. City of Aracaju, Sergipe State, Brazil (EMURB) - investigate critical erosion problem and resulting seawall failure at Coreo do Meio beaches along the entrance to the Rio Sergipe estuary and recommend solution for mitigating problem.
29. Connelly Containers, Inc. - investigation of the feasibility of withdrawing water from the Manayunk Canal for generating hydropower at the Connelly Containers, Inc. plant on Venice Island, Manayunk, Philadelphia.
30. Betz, Converse & Murdoch, Inc. - consultation on plans for a dispersion study along the Delaware River at Bristol, PA.

31. US Army Engineer District, Philadelphia - synthetic generation of longshore sand transport data and simulation of the operation of a sand bypassing system for Indian River Inlet, DE.
32. Hudson GEOTECH International - flood damage study at Valhoma Creek, Tulsa, OK.
33. Public Storage, Inc. - study of flood potential and design of remedial measures for Southampton Creek, Warminster, PA.
34. US Army Coastal Engineering Research Center - preparation of an Engineer Manual on the design of shoreline erosion control structures.
35. US Coast Guard - evaluation of wind- and ship-generated waves at a proposed Marine Safety Office site on the Delaware River, Philadelphia, PA.
36. International Playtex, Inc. - coastal processes of tampon applicators in the marine environment.
37. Rogers, Golden & Halpern, Inc. - consultation on sand bypassing system design for Indian River Inlet, DE.
38. Pennoni Associates, Inc. - develop wind- and ship-wave environment for a proposed marina in Margate, NJ.
39. US Army Engineer District, Philadelphia - synthetic generation of longshore sand transport data and simulation of the operation of a sand bypassing system for Manasquan Inlet, NJ.
40. State of New Jersey - evaluation of coastal processes at Bradley Beach, NJ, and recommendations regarding modifications to shore protection structures.
41. State of New Jersey - recommendations on the location of the navigation channel within Townsends Inlet and the use of sand dredged from the inlet as a source of beach nourishment for Avalon, NJ.
42. Hudson GEOTECH International - flood damage and retaining wall failure, New Hope Playhouse, New Hope, PA.
43. Hudson GEOTECH International - determination of cause of washout and landslide at Point Pleasant pumping station, Point Pleasant, PA.

44. City of Ocean City, NJ - evaluation of proposed dune modifications at two ocean-front residential sites.
45. Dr. Lawrence Pape - evaluation of beach conditions and bulkhead stability for a property on Shelter Island, Long Island, NY.
46. Mr. Robert Gerard - evaluation of a proposed solution to a flooding problem at 9236 Bryn Mawr Avenue, Pennsauken, NJ.
47. City of Ocean City, NJ - preliminary design of a nearshore breakwater to stabilize and protect Ocean City's beach in the vicinity of 9th Street.
48. City of Ocean City, NJ - evaluation of the suitability of sand from Drag Island, NJ as a source of beach nourishment for Ocean City.
49. Hudson GEOTECH International - hydrologic investigation of area upstream of B & O Railroad embankment failure.
50. City of Ocean City, NJ - preparation of a coastal sand dune development and maintenance program for the City of Ocean City.
51. State of New Jersey - evaluation of the performance of a beach nourishment project at Atlantic City, NJ.
52. New Jersey Marine Sciences Consortium - consultation on the development of a nearshore current/circulation measurement program in support of ocean pollution study by NJMSC.
53. Andropogon Associates, Inc. - hydrologic study of creek through Trexler Park, Allentown, PA
54. Hudson GEOTECH International, Inc. - evaluation of seismic analysis of site for solar energy conversion plant in California.
55. Friends of the Wissahickon - hydrologic and hydraulic analysis of the Gorgas Lane tributary of the Wissahickon Creek, Fairmount Park, Philadelphia, PA to determine how improvements can be made to reduce flooding and erosion.
56. Mid West Construction, Inc. - consultation on construction of marina breakwater in Lake Michigan.

57. Dravo-Van Houten, Inc. - consultation on potential for sedimentation problems in Port Reitz harbor expansion navigation channel, Mombassa, Kenya.
58. Dravo-Van Houten, Inc. - evaluation of longshore sediment transport conditions along south coast of Long Island in the vicinity of Fire Island Inlet, Suffolk County, NY to determine effect of structures proposed to protect Suffolk County sewer outfall where it crosses beach.
59. Offshore & Coastal Technologies, Inc. - review of the rubble toe protection design for a revetment at Ocean City, MD
60. M.V. Engineering & Lomax Associates, Inc. - water circulation analysis for a proposed lagoon in a marina planned for Cape May Harbor, NJ.
61. Lynch, Martin & Philibosian, Attorneys - determination of the cause of flooding at Moor's Landing, NJ along the Manasquan River.
62. New Jersey Shore Foundation and Lehigh University - monitoring the effects of a shore-parallel, precast concrete breakwater system on the beaches of Sea Isle City, NJ.
63. City of Ocean City, New Jersey - testimony before Zoning Board on the results of a dune study prepared for the City of Ocean City.
64. Woodward-Clyde Consultants - flood level determination for industrial site along the Delaware Bay in southern New Jersey.
65. MV Engineering - determination of flushing characteristics of a lagoon proposed for marina development in Cape May, NJ.
66. US Army Corps of Engineers, Philadelphia District - consultant on construction claims at Barnegat Inlet, NJ, New South Jetty construction.
67. Lisa Hardy, Esq. - consultation on State of New Jersey constraints on coastal sand dunes and beach front development.
68. White Horse Village - determination of seepage rates through a gabion dam and evaluation of flood attenuation performance of dam and detention basin.

69. International Environmental Services, Inc. - evaluation of flooding experienced in the vicinity of Granite Run Mall, Media, PA, due to rainstorm of 13 July 1991.
70. Clark, Ladner, Fortenbaugh & Young - evaluation of cause of flooding at Brooks Armored Car building on Governor Printz Boulevard due to storm of 5 July 1989 at Shellpot Creek, New Castle County, Delaware.
71. Walker, Previti, Holmes & Associates - consultation on design of timber and stone groins for Sea Isle City, New Jersey, and evaluation of the groins' impact on downdrift beaches.
72. Associated Construction Technologies, Inc. - evaluation of the hydraulic performance of three screw pumps at Salem Wastewater Treatment Plant, New Jersey.
73. U.S. Army Corps of Engineers, Coastal Engineering Research Center - participation in workshop to define contents of coastal structure planning and design chapters of Coastal Engineering Manual.
74. U.S. Army Corps of Engineers, Coastal Engineering Research Center - preparation of Coastal Engineering Manual Chapter entitled "Wind Blown Sand Transport."
75. West End Boat Club & Sullivan Floation Systems, Inc. - wind and ship wave analysis for a marina site, Delaware River, Essington, PA.
76. City of Ocean City, NJ - preliminary evaluation of proposed dredging of backbay lagoons and marinas.
77. Pennoni Associates, Inc. - evaluation of the hydraulics of the Manayunk Canal and the design of hydraulic structures to control flow as part of a project to rehabilitate the canal in Philadelphia, PA
78. City of Sea Isle City/Walker Previti, Holmes & Associates, Inc. - design of groin field for north end of Sea Isle City, New Jersey
79. Greater Wildwoods Development and Tourism Authority - study of beach processes in the vicinity of the proposed Wildwood Convention Center.
80. Poverty Beach Joint Venture - study of coastal processes at the site of a proposed development in Cape May, New Jersey.

81. Seneca Pointe Marina, Havre de Grace, MD - wind and ship wave study for proposed marina.
82. Walker, Previti, Holmes & Associates and the City of Sea Isle City, NJ - design of groin field for the northerly beaches of Sea Isle City.
83. Walker, Previti, Holmes & Associates and the City of Sea Isle City, NJ - design of a terminal groin for the Townsend's Inlet shoreline of Sea Isle City.
84. Walker, Previti, Holmes & Associates and the City of Sea Isle City, NJ - sediment budget for beaches south of 88th Street in Sea Isle City and evaluation of alternative shoreline stabilization measures.
85. White & Williams, Attorneys at Law - evaluation of flooding at Cabrini School, Fairless Hills, Bucks County, PA
86. Law Offices of Robert A. Stutman - investigation of reservoir regulations and cause of flooding at Perryville Yacht Club, Perryville, MD on 20 January 1996.
87. Boles, Smyth & Associates – regulatory flood study for proposed residential development on Venice Island, Manayunk, Philadelphia, PA.
88. Archdiocese of Philadelphia, Catholic Cemeteries Office – analysis of proposed grave vault spacing on groundwater infiltration rates.
89. Pennoni Associates, Inc. – evaluation of scour and deposition potential resulting from new supplementary piling to support pier.
90. Walker, Previti, Holmes & Associates – evaluation of potential impacts on Sea Isle City of extending 8th Street jetty in Avalon, New Jersey.
91. T. Sharp, Inc. - redesign of vinyl bulkhead for Harbor View Park, Cape May, New Jersey.
92. Geosystems Consultants, Inc. – determination of wave environment and wave and current loads on a sheet pile jetty at Motiva refinery facilities, Delaware City, DE.
93. S.T. Hudson Engineers, Inc. – design of a nearshore breakwater system for wetlands development at Holt's Landing State Park, Delaware.

94. State of Washington, Washington Fast Ferries – service on an expert review panel to evaluate the impact of high speed ferry operations on beaches and shoreline structures in Rich Passage.
95. Golden, Rothschild, Spagnola, Lundell & Levitt, PC – expert report on coastal processes relative to drowning incident at Jenkinson’s Beach, Point Pleasant, NJ.
96. New Jersey Sports and Exposition Authority – prediction of dune growth rates and monitoring of dunes at site of proposed Wildwood Civic Center, Wildwood, NJ.
97. New Jersey Visitor and Convention Bureau, Wildwood Convention and Civic Center - review of FEMA requirements for the construction of a hotel in the V-zone and the requirements to reclassify the site.
98. NSF Cyber Security Workshop - editorial review of workshop proceedings
99. Paragon at Seaside Heights – review of dune conditions at site of proposed development
100. FHWA/University of South Alabama – Advisory Panel, preparation of a technical report addressing the design and construction of highways in coastal area.
101. Gannett-Fleming, Inc. – preliminary design of shore protection for AMTRAK’s Niantic River Bridge
102. Gannett-Fleming, Inc. – preliminary design of shore protection for Deep Creek Lake, MD
103. Gannett-Fleming, Inc. – preliminary design of shore protection for Little Deal Island, MD
104. Gannett-Fleming, Hardesty & Hanover, AMTRAK – design of beach nourishment and jetty project at Niantic River crossing, Town of East Lyme, CT.
105. Vincent Sansone – analysis of level of shore protection provided if Strathmere dune line is moved seaward.
106. Gannett-Fleming, Inc. – analysis of tidal datum information at Hackensack, NJ.

107. Joseph, Greenwald & Laake – expert witness for wrongful death lawsuit, Turks & Caicos Islands
108. John Kornick Associates – evaluation of bulkhead and its impact on the establishment of wetlands at a property in North Wildwood, NJ.
109. White & Williams – forensic investigation of the cause of flooding in Building 500 at the Atrium Corporate Park, Somerset, NJ.
110. Michael Lorenz – evaluation of the condition of a bulkhead at 40 Waterway Road, Ocean City, NJ.
111. Matthiesen, Wakert & Lehrer – evaluation of the cause of flooding at the Condor Automotive facility, Dresher, PA
112. The Morey Organization – testimony to Wildwood Planning Commission on the impact of constructing a amusement facility on the beach at Adventure Pier, Wildwood, NJ and its relation to the FEMA V-Zone.
113. Matthiesen, Wakert & Lehrer – evaluation of the cause of flooding at the Fort Washington Volvo dealership, Fort Washington, PA.
114. Ocean & Coastal Consultants – review of groin design for the Revel Casino, Atlantic City, NJ.
115. Lawrence Smith – review of proposed seawall modifications at 325 Atlantic Avenue, Ocean City, NJ.
116. Thomas McGowan – review of proposed seawall modifications and its terminus at 237 Beach Road, Ocean City, NJ
117. URS Group, Oakland, CA – work for NASA to develop system to produce bio-fuel from algae in geomembrane bags to be deployed in the ocean.
118. Hatch Mott MacDonald – consultation on the selection of a consulting firm to design shore protection for Avalon, NJ.
119. Dr. Kathleen Arena – preparation of a report for obtaining a permit to construct a single family dwelling behind the dune at 5 Beach Road, Villas, NJ.

120. West End Boat Club – evaluation of proposed plan to dredge marina and the necessity of a sheet pile barrier to reduce sedimentation.

121. Lomax Consulting – forensic analysis of the cause of flooding in the Gifford Marina, NJ.

122. Seaboard Marina, Pennsgrove, NJ – development of marina layout and estimate of expected shoaling rates and dredging requirements.

123. Seabreeze Homeowners Association - design of shore protection for Seabreeze, Delaware Bay, NJ

124. John Kornick Associates - Determination of wave environment for marina development at Snug Harbor, Cape May, NJ

125. White & Williams, LLC – evaluation of the cause of flooding at the King of Prussia Mall due to the 1 October 2010 rainfall. Performed an analysis of precipitation data to determine the frequency of occurrence of rainfall.

126. The Woods Hole Group, MA – subcontractor on Corps of Engineers' Philadelphia District Regional Sediment Management Study report preliminary to the preparation of a Feasibility Report on the management of coastal sediments for beach nourishment and navigation maintenance.

127. West End Boat Club, Essington, PA – evaluation of proposed sheet pile cutoff barrier on the rate of sedimentation in the Delaware River marina.

128. Battelle Memorial Institute - participated in the independent external peer review panel to review the Jamaica Bay, Marine Park & Plumb Beach, New York Environmental Restoration Project Draft Interim Feasibility Report, Kings and Queens Counties, New York as a subcontractor to Battelle.

129. ASCE – served as a co-instructor with Mr. Charles Calhoun in an ethics course given at the Coastal, Ocean, Port & River Institute's (COPRI) Congress, Memphis, TN, November 2010.

130. Piers Marina – developed wind and ship wave environment for the design of a floating breakwater, December 2011.

131. Gannett-Fleming – developed water level and wind wave conditions for reservoir modifications for the Tampa Bay Water Authority, computed wave forces on intake tower, intake screens, bridge piles,

132. The Woods Hole Group, MA – participated in the development of a feasibility report for the US Army Corps of Engineers' Philadelphia District for their Regional Sediment Management Study. Analyses included inlet dredging analyses, shoreline change mass curve analysis, spatial analysis of offshore borrow areas and their proximity to beach nourishment areas, opportunities for backpassing and Corps sand transport equipment, March 2010 – February 2012.

133. Hyland, Levin, LLC Attorneys – evaluation of dune conditions at the Greenberg property on Long Beach Island, Barnegat Light, NJ, January 2012.

134. Hatch Mott MacDonald – consultation on the evaluation of engineering firm proposals to study the need for coastal structures to mitigate erosion of Avalon, NJ's beaches, January 2012.

135. Langsam, Stevens, Silver and Hollander – consultation on case involving the flooding of a residence.

136. eDesign Dynamics – consultation on a study of the sedimentation at Goldsmith Inlet, Long Island, NJ.

137. Neuberger, Quinn, Gielen, Rubin & Gibber – determination of the cause of flooding during Tropical Storm "Irene" at three nursing homes on the Cape May peninsula.

138. White & Williams – determination of the cause of flooding at Ocean County College TV studio during the storm of 3-4 September 2012.

CONSULTING REPORTS:

1. Weggel, J.R., "Breakwater Design Lectures", Lecture notes published for Advanced Course on Port Planning and Design, University of Buenos Aires, Argentina, September 1983.

2. Weggel, J.R., "Sunshine Skyway Bridge, Tampa, Florida - Review of Model Tests of Proposed Protective Islands", prepared for Hydro Research Service, Inc., Santa Clara, CA, February 1984.

3. Weggel, J.R., "TRW/Offshore Thermal Energy Conversion - Hydraulic Model Tests of Proposed Kahe, Hawaii, Installation", prepared for Hydro Research Science, Inc., Santa Clara, CA. March 1984.
4. Weggel, J.R., "Navigation Channel Maintenance and Sedimentation Control at the Mouth of the Rio Sergipe, Aracaju, Sergipe State, Brazil", prepared for Hidroservice: Engenharia de Projectos, Ltda, Sao Paulo, Brazil, June 1984.
5. Weggel, J.R., "Review of Site Development Plan, Lots 6K, 102K and 103K, Block 200, Ocean City, Cape May County, New Jersey (Berman Property)", prepared for the City of Ocean City, New Jersey, May 1984.
6. Sorensen, R.M. & J.R. Weggel, "Beach Processes and Coastal Structures at Atlantic City, New Jersey", Fritz Engineering Lab Report, Lehigh University, Bethlehem, PA, May 1984.
7. Weggel, J.R. "Review of Wave Environment and Wave Loading on a Breakwater for the Proposed Seaview Marina, Egg Harbor Township, NJ", prepared for the Township of Egg Harbor, November 1984.
8. Weggel, J.R. and R.M. Sorensen, "Review of Plans for the Rehabilitation of Rollover Fish Pass, Gilcrist, Texas", prepared for the University of Texan at Austin, April 1985.
9. Weggel, J.R. "Wind and Ship Waves at the US Coast Guard's Delaware River Marine Safety Office Site and Recommendations for a Wave Attenuating Breakwater," prepared for Commander, Third Coast Guard District, Governors Island, NY, August 1986.
10. Weggel, J.R. "Hydrologic and Hydraulic Analysis - Evaluation of a Proposed Development Plan for Lot 16, Block 24, Warminster, Bucks County, PA," prepared for Public Storage, Inc., Mount Laurel, NJ, March, 1986.
11. Weggel, J.R. "Evaluation of Wave and Current Forces on Proposed Marina Structures at Margate, NJ," prepared for Pennoni Associates, Inc., November 1986.
12. Weggel, J.R. "Preliminary Design of a Nearshore Breakwater to Protect Ocean City's Beach in the Vicinity of 9th Street," prepared for the City of Ocean City, NJ, January 1987.

13. Weggel, J.R. "Suitability of Sand from Drag Island as Beach Nourishment for Ocean City, New Jersey," prepared for the City of Ocean City, NJ, August 1987.
14. Douglass, S.L. & J.R. Weggel "Hydrologic Investigation of the B & O Railway Failure," prepared for Hudson GEOTECH International, File No. G 5307, May 1987.
15. Sorensen, R.M. & J.R. Weggel "Improvement of Beach Conditions and Bulkhead Stability for Property Located at 68 Gardiners Bay Drive, Shelter Island, NY," prepared for Dr. Lawrence Pape, June 1987.
16. Weggel, J.R. "A Dune Establishment and Maintenance Program for the City of Ocean City, New Jersey," prepared for the City of Ocean City, New Jersey, Coastal & Marina Engineering Consultants, Inc., June 1988.
17. Weggel, J.R. "Report on Flooding, Jervis Collision Center & Philmont Associates Properties, Philmont Road, Bucks County, PA" prepared for Berlinger & Small, Attorneys at Law, Abington, PA, November 1988.
18. Weggel, J.R. "Longshore Sand Transport Analysis, Suffolk County Sewer Outfall Site, Cedar Island Beach, Long Island, New York, prepared for Dravo-VanHouten, 11 Penn Plaza, New York, NY, 16 January 1989.
19. Sorensen, R.M., J.R. Weggel & S.L. Douglass, "Monitoring and Evaluation of 1986 Beach Nourishment, Atlantic City, New Jersey," Marina & Coastal Engineering Consultants, Inc., prepared for the State of New Jersey, Division of Coastal Resources, February 1989.
20. Weggel, J.R. & T.Z. Wilson, "A Hydrologic Investigation of the Gorgas Lane Tributary of the Wissahickon Creek, Philadelphia, PA," prepared for Friends of the Wissahickon, 24 June 1989.
21. Weggel, J.R. "Evaluation of the Flushing Characteristics of a Proposed Marina Lagoon at Cape May, NJ," prepared for M.V. Engineering, Cape May Court House, NJ, March 1990.
22. Weggel, J.R. "Interim Report - Barnegat Inlet New South Jetty Construction Claim," prepared for Philadelphia District, US Army Corps of Engineers under contract DACW-90-M-1140, March 1991.
23. Weggel, J.R. "Barnegat Inlet - Review of a Consulting Report by R.G. Dean Prepared for Morrison-Knudsen Company, Inc." prepared for

Philadelphia District, US Army Corps of Engineers under contract DACW-90-M-1140, August 1991.

24. Weggel, J.R. "An Investigation of Flooding Caused by the 13 July 1991 Storm at Granite Run Mall, Media, PA," prepared for International Environmental Services, Inc. 595 East Swedesford Road, Suite 2000, Wayne PA, February 1992.

25. Weggel, J.R. "Computation of Potential Seepage through a Gabion Dam at White Horse Village, Newtown Square, PA and a Determination of its Effect on Flood Discharge Attenuation," prepared for White Horse Village, Newtown Square, PA and Bower Lewis Thrower/Architects, Philadelphia, PA, February 1992.

26. Weggel, J.R. "Beach Profile and Groin Behavior Analyses, Sea Isle City, New Jersey," prepared for Walker, Previti, Holmes & Associates and the City of Sea Isle City, NJ, August 1992.

27. Weggel, J.R. "Evaluation of the Cause of Flooding at the Brooks Armored Car Facility, New Castle County, Delaware," prepared for Clark, Ladner, Fortenbaugh & Young, September 1992.

28. Weggel, J.R. "An Assessment of the Effects of the Proposed 83rd and 89th Street Groins on Drowned Beaches, Sea Isle City, New Jersey," prepared for Walker, Previti, Holmes & Associates and the City of Sea Isle City, NJ, November 1992.

29. Weggel, J.R. "Wind and Ship Wave Analysis, West End Boat Club, Delaware River, Essington, PA," prepared for West End Boat Club, Essington, PA, July 1994.

30. Weggel, J.R. "Wind Blown Sand Transport," prepared for the U.S. Army Corps of Engineers Coastal Engineering Research Center under contract DACW-39-93-M-6868, 15 April 1994.

31. Weggel, J.R. "The Cause of Flooding at the Quakertown High School Gymnasium and Recommended Remedial Actions," prepared for CFP Environmental Services, Norwood, PA, 15 March 1995.

32. Weggel, J.R. "Wind-Wave, Ship-Wave and River Current Analysis, Proposed Seneca Pointe Marina, Chesapeake Bay, Havre de Grace, MD, prepared for Headwater Construction Company, Suite 103, Barksdale Professional Center, Barksdale Road, Newark, DE, 25 March 1995.

33. Weggel, J.R. "An Evaluation of the Shoaling of Inside Thorofare at the Bay-Port Condominium, Atlantic City, New Jersey," prepared for Robert Matthews, Linwood, NJ, 14 April 1995
34. Lomax, J.L. & J.R. Weggel, "A Preliminary Assessment of Lagoon Dredging and Dredged Material Management, City of Ocean City, New Jersey," prepared for the City of Ocean City, New Jersey, July 1995
35. Weggel, J.R. "Investigation of Damage to Under-Media Drain Tiles at the North Jersey District Water Supply Commission's Water Treatment Plant, Wanaque, NJ" prepared for International Environmental Services, Wayne, PA, 29 May 1995.
36. Weggel, J.R. "Hydrologic and Hydraulic Analysis of the Manayunk-Schuylkill Canal, Philadelphia, PA," prepared for Pennoni Associates, Inc., Philadelphia, PA, August 1995.
37. Weggel, J.R. "Design of a Groin Field for the Beaches North of Thirty-first Street in Sea Isle City, New Jersey, prepared for the City of Sea Isle City and Walker, Previti, Holmes and Associates, December 1995.
38. Weggel, J.R. "Coastal Processes Relevant to the Proposed Wildwood Convention Center Site, Wildwood, NJ, prepared for the Greater Wildwoods Tourism Improvement and Development Authority, Wildwood, NJ, 27 December 1995.
39. Weggel, J.R. "Sand Budget for Proposed Dune, Greater Wildwoods Civic Center Site, Wildwood, NJ," prepared for the Greater Wildwoods Tourism Improvement and Development Authority, Wildwood, NJ. 27 19 July 1996.
40. Weggel, J.R. "Analysis of Flooding at the Red Cross Building at 7th & Spring Garden Streets, Philadelphia, PA, During the 14 July 1994 Rainstorm," prepared for Law Offices, White & Williams, 1800 Liberty Place, Philadelphia, PA 19103-7395, 3 January 1997.
41. Weggel, J.R. "Design of a Terminal Groin at Townsends Inlet, Sea Isle City, New Jersey," prepared for the City of Sea Isle City and Walker, Previti, Holmes & Associates, 156 Stagecoach Road, Marmora, NJ, 20 June 1996.
42. Weggel, J.R. "Sediment Budget Analysis and Evaluation of Beach Stabilization Alternatives, Townsends Inlet Shoreline, Sea Isle City, New

Jersey,” prepared for the City of Sea Isle City and Walker, Previti, Holmes & Associates, 156 Stagecoach Road, Marmora, NJ, March 1997.

43. Weggel, J.R. “The Impact on Adjacent Beaches of Cutting a Tidal Inlet near Norbury’s Landing, Middle Township, Cape May County, New Jersey,” prepared for Mr. Richard Adelizzi and Levin & Hluchan, Attorneys at Law, Voorhees, NJ, 27 November 1996.

44. Weggel, J.R. & B. Marengo “A Schuylkill River Model for the Vicinity of the Queen Lane Water Intake and the Wissahickon Creek, Philadelphia, PA” prepared for the City of Philadelphia, Water Department by Department of Civil & Architectural Engineering, Drexel University, 30 June 1999.

45. Weggel, J.R. (1999) “Design of Nearshore Breakwaters for Shore Protection and Salt Marsh Development: Holt’s Landing State Park, Indian River Bay, Delaware,” prepared for S.T. Hudson Engineers, Camden, NJ, 7 September 1999.

46. Weggel, J.R. (1999) “Application of ‘DYNLET1’ Inlet Model to Wetlands Design, Northern Mitigation Area, Bayonne, NJ,” prepared for Princeton Hydro LLC, Lambertville, NJ, 2 January 1999.

47. Weggel, J.R. (1998) “Breakwater Designs for Wetlands Mitigation, Bayonne, NJ,” prepared for Princeton Hydro LLC, Lambertville, NJ, 29 November 1998.

48. Weggel, J.R. (1998) “The Effect on Coastal Processes of a Proposed Dwelling, Block 37, Lots 4 & 5, Bay Head, Ocean Count, New Jersey,” prepared for Bennett & Yoskin, Attorneys at Law, Princeton, NJ, 17 April 1999.

49. Weggel, J.R. (1999) “The Impact on Fronting Dunes of Constructing a Home at 5299 Dune Drive, Avalon, NJ,” prepared for Engineering Design Associates, P.A. Ocean View, NJ, 26 January 1999.

50. Weggel, J.R. & R. M. Sorensen (1999) Analysis of Water Levels and Wave Conditions on 17 August 1995 at Jenkinson’s Pavilion Beach, Point Pleasant, New Jersey, Akram Abdul-Majeed v. Jenkinson’s Pavilion,” prepared for Ronald S. Levitt, Esq. Attorney at Law, Golden, Rothschild, Spagnola, Lundell & Levitt, P.C., Bridgewater, NJ, 26 July 1999

51. Weggel, J.R. (1999) "First Dune Monitoring Report, Wildwoods Convention and Civic Center, Wildwood, NJ," prepared for New Jersey Sports and Exposition Authority, East Rutherford, NJ, 20 August 1999.
52. Weggel, J.R. (2000) "Bulkhead Design for Harborview Park, Cape May County, Cape May, New Jersey," prepared for T.J. Sharp, Inc. 303 Washington Lane, Fort Washington, PA 19034.
53. Weggel, J.R. (2000) "The Impact of Proposed Grave Spacing on Groundwater Recharge at All Soul's Cemetery, Brandywine Township, Chester County, PA," prepared for Catholic Cemeteries Office, Archdiocese of Philadelphia, 14 April 2000.
54. Weggel, J.R. (2000) "Flood Hazard Analysis for Proposed Development on Venice Island, Manayunk, Philadelphia, PA," prepared for Boles, Smyth Associates, Inc., 17 January 2000.
55. Weggel, J.R. (2000) "Wave and Wave Force Analysis, Motiva Jetty, Delaware City, Delaware," prepared for GeoSystems Consultants, Inc. Fort Washington, PA, 31 January 2000.
56. Weggel, J.R. (2000) "Wake Impacts of Chinook Class Passenger-Only Ferries in Rich Passage on the Seattle to Bremerton Route, Washington State Ferries," prepared for Washington State Ferries, 20 April 2000.
57. Weggel, J.R. "Coastal Processes in the Vicinity of 39th Street and their Effect on Proposed Development of Lot 16, Block 3901, Ocean City, New Jersey," prepared for Clement F. Lisitski, Esq., Attorney at Law, Ocean City, NJ, 26 February 2001.
58. Weggel, J.R. "Design of Protective Breakwaters for the U.S. Coast Guard Station, Cape May, NJ," prepared for Duffield Associates, Inc. and the US Army Corps of Engineers, Philadelphia, District, 12 January 2001, revised 6 June 2001.
59. Weggel, J.R. "Dune Monitoring Report, Wildwoods Convention and Civic Center, Wildwood, NJ," prepared for New Jersey Sports & Exposition Authority, East Rutherford, NJ, 4 November 2000.
60. Weggel, J.R. "Evaluation of Dune Designation at the Midway Beach Condominium, Berkeley Township, Ocean County, NJ," prepared for the Midway Beach Condominium Association, Toms River, NJ, 30 July 2001.

61. Weggel, J.R. "Design of a Protective Revetment for the Zirkle Property on the Cohansey River, Fairton, NJ," prepared for Princeton Hydro, LLC, Lambertville, NJ, 9 March 2001.
62. Weggel, J.R., "Determination of the Wind and Ship Wave Environment at the Bretnall Property on the Cohansey River, Fairton, NJ., prepared for Princeton Hydro, LLC, Lambertville, NJ, 4 July 2001.
63. Weggel, J.R., "Coastal Processes in the Vicinity of the Tropicana Casino, Atlantic City, NJ," prepared for Ian Jerome, Planner, Absecon, NJ, 28 November 2000.
64. Weggel, J.R., & J.J Mulhern, "Burlington County Farmland Program: Independent Overview: Interim Report," prepared for the Burlington County Board of Chosen Freeholders, Burlington County, New Jersey, 26 October 2000.
65. Weggel, J.R., "Effect of Avalon Jetty Extension on Longshore Transport Rates at Sea Isle City, NJ," letter report to Andrew Previti, Walker, Previti, Holmes & Associates, Marmora, NJ, 19 November 2000.
66. Weggel, J.R. & Michael Piasecki, "Evaluation of Delaware River Flood Levels and Floodway Determination for Tinicum Township, Bucks County, Pennsylvania, as Proposed by the Federal Emergency Management Agency, 27 March 2002," prepared for Delaware Valley Concrete Company, Inc., Hatboro, PA, 15 July 2002.
67. Weggel, J.R. "Wind Waves and Ship Waves at the Proposed Boatworks Marina, Bayonne, New Jersey," prepared for Baker Residential, Morris Plains, NJ, 23 March 2002.
68. Weggel, J.R. "The Impact on Fronting Dunes of Constructing a Home at 5109 Dune Drive, Avalon, NJ," prepared for Engineering Design Associates, P.A., Ocean View, NJ, 28 March 2002.
69. Kriebel, D., J.R. Weggel & R.A. Dalrymple. "Independent Study Report, Brevard County, Florida, Shore Protection Project," prepared for the U.S. Army Corps of Engineers, Jacksonville District under provisions of Section 310, Public Law 106-53, the Rivers and Harbors Act of 2000, draft report, 19 August 2002.
70. Weggel, J.R. "Revetment and Nearshore Breakwaters Design for Shore Protection and Marsh Development, Pea Patch Island, Delaware," prepared for S.T. Hudson Engineers, Camden, NJ, 15 July 2002.

71. Weggel, J.R., "Coastal Flooding & Velocity Zone Analysis, Rambler Road to Cresse Road, Wildwood Crest, New Jersey," prepared for the Borough of Wildwood Crest, Cape May County, NJ, 30 Dec 2002, revised 31 July 2003.

72. Kriebel, D., J.R. Weggel & R.A. Dalrymple (2002) "Independent Study Report, Brevard County Florida Shore Protection Project, prepared for the U.S. Army Corps of Engineers, Jacksonville District and Broward County, Florida, 30 September 2002.

73. Kriebel, D, J.R. Weggel & R.A. Dalrymple "Independent Coastal Engineering Study of Canaveral Harbor and the Brevard County Shore Protection Project," Proceedings of the Florida Shore & Beach Preservation Association Conference, February 2003.

74. Weggel, J. Richard (2004) Coastal Processes at the Stuart Property, Block 855, Lots 1 & 1.01 Township of Upper, Cape May County, Strathmere, NJ, prepared for Mr. Jeffrey Stuart, Strathmere, NJ, 5 January 2004

75. Weggel, J. Richard (2004) Evaluation of Dune Designation at the Osborn Property, Lot 30, Block 36, Brick Township, Ocean County, NJ, prepared for Jack and Carol Osborn, 443 Route 35 South, Brick Township, NJ 08738, 4 May 2004

76. Weggel, J. Richard (2004) Wind Waves and Ship Waves at the Proposed Thames Landing Marina, Quaker Hill, Connecticut, prepared for Forest Homes of New England, LLC, Thames Landing Marina, 64 Scotch Cap Road Quaker Hill, CT 06375, 24 July 2004

77. Weggel, J.R. (2005) "Wind and Ship Waves at the Proposed Seaboard Marina, Absecon Inlet, Atlantic City, NJ." prepared for Nassau Marina Holdings, LLC, 1800 Bay Avenue, Bay Head, NJ 08742, 17 January 2005

78. Weggel, J. Richard (2005) Review of Conditions Causing Flooding Downstream of the Warrington Retail Center and Creekview Phase II Developments, Warrington Township, Bucks County, Pennsylvania prepared for Langsam Stevens & Silver LLP, 1616 Walnut Street, Suite 1700, Philadelphia, PA 19103-5319, 24 March 2005

79. Weggel, J. Richard (2004) Rehoboth Groins – State of Delaware
Weggel, J.R. (2004) "Summary of Observations – Groin Field North of

Rehoboth Beach, Delaware,” prepared for the State of Delaware, 10 December 2004

80. Weggel, J. Richard (2005) “Mondelli Property Dune Impact Evaluation, Lots 6 & 8, Block 7, Barnegat Light, Long Beach Island, New Jersey, “ prepared for Mr. Joseph Mondelli, Sanibel Island, FL, 30 June 2005

81. Weggel, J.R. (2005) “Wind Waves & Ship Waves at the Ocean Beach Marina, Lavallette, New Jersey,” prepared for Nassau Marina Holdings, LLC, 1800 Bay Avenue, Bay Head, NJ 08742

82. Weggel, J.R. (2005) “Wave and Water Level Environment and V-Zone Designation at the Rod ‘n’ Reel Restaurant, Chesapeake Beach, MD,” prepared for Mr. Fred Donovan, 30 April 2005

83. Weggel, J. Richard (2005) “Preliminary Design of Shore Protection, Deep Creek Lake State Park, Garrett County, Maryland,” prepared for Gannett-Fleming, Inc., Seton Business Park, Suite A, 4701 Mount Hope Drive, Baltimore, MD 21215-1883, 19 August 2005.

84. Weggel, J. Richard (2005) “The Cause of Flooding at the Pine Run Community during Tropical Storm Allison, 16-17 June 2001,” prepared for Dugan, Brinkman, Maginnis & Pace, Attorneys at Law, 1880 John F. Kennedy Boulevard, Suite 1400, Philadelphia, PA 19103, 26 July 2005

85. Weggel, J.R. “Flooding at Mack Electrical Systems, 1 North Avenue, Wyncote, Cheltenham Township, PA,” prepared for Mack Electric Devices, Inc., 25 South Avenue, Wyncote, PA 19095-1304, 25 November 2005

86. Weggel, J.R. “The Effect of the Proposed *Martinique Resort Hotel Condominiums* on Wind Patterns and Coastal Processes, Wildwood, NJ,” prepared for Martinique Resorts, L.L.C. 8801 Pacific Avenue, Wildwood, NJ 08260, 17 April 2006

87. Weggel, J.R. “The Effect of the Proposed *Nouveau Wave Hotel* on Wind Patterns and Coastal Processes, Wildwood, NJ,” prepared for Pitcairn Properties, Inc., One Pitcairn Place, Suite 1500, 165 Township Line Road, Jenkintown, PA 19046-3599, 6 January 2006

88. Weggel, J.R. “Ocean County Digester Cover: Circumstances Leading to Failure,” prepared for RAC Contractors, Inc., 4 Ridge Road, Southampton, NJ 08088 29 September 2005.

89. Weggel, J.R. "The Effect of the Proposed *Starlight Resort Hotel & Condominiums* on Wind Patterns and Coastal Processes, Wildwood, NJ," prepared for BMF Investments, LLC, 120 West Jefferson Avenue, Wildwood Crest, NJ 08260, 3 March 2006
90. Weggel, J.R. "Wind and Ship Waves at the Summit North Marina, Chesapeake and Delaware Canal, DE," prepared for Harold W. Schneikert, Jr., 724 Greenhill Avenue Wilmington, DE 19805-2854, 3 May 2006
91. Weggel, J.R. "Design of Shore Protection for Little Deal Island, MD," prepared for Gannett-Fleming, Inc. Seton Business Park 4701 Mount Hope Drive, Suite A Baltimore, MD 21215, 3 June 2006
92. Weggel, J.R. "The Effect of the Proposed *East Bennett Avenue Condo/Hotel* on Wind Patterns and Coastal Processes, Wildwood, NJ," prepared for Wildwood Walk Associates, 31-11 Broadway, Fairlawn, NJ 07410, 20 March 2006
93. Weggel, J.R. "Preliminary Evaluation – FEMA V-Zone Determination, American Inn and Matador Motels, North Wildwood, NJ," prepared for Mr. Don Steffieri, *American Inn* Motel, 510 East 13th Avenue, North Wildwood, NJ, 16 February 2006
94. Weggel, J.R. (2007) "Storm Drain Outfall Design, Lower Township, New Jersey," prepared for Hatch Mott MacDonald, 833 Route 9 North, Cape May Court House, NJ, 13 August 2007.
95. Weggel, J.R. (2007) "Interim Report, Bottom Sediment Mobilization by the *Doris Hamlin*, 23 January 2004," prepared for S.T. Hudson Engineers, Inc. 840 Cooper Street, Camden, NJ, 25 July 2007.
96. Weggel, J.R. (2007) 'Coastal Flooding and Velocity Zone Analysis, Asbury Park Boundary to Ocean Pathway, Ocean Grove, Neptune Township, New Jersey,' prepared for Wesley Atlantic Village Enterprise, LLC, Ocean Grove, Township of Neptune, Monmouth County, NJ, 26 June 2007
97. Weggel, J.R. (2007) 'Supplement to Coastal Flooding and Velocity Zone Analysis, Asbury Park Boundary to Ocean Pathway, Ocean Grove, Neptune Township, New Jersey,' prepared for Wesley Atlantic Village Enterprise, LLC, Ocean Grove, Township of Neptune, Monmouth County, NJ, 20 August 2007

98. Weggel, J.R. (2007) "Flood Hazard Analysis for Proposed Development on Venice Island, Manayunk, Philadelphia, PA, Second Supplementary Report, prepared for Stephen Varenhorst Architects, 1100 East Hector Street, Suite 313, Conshohocken, PA, 3 March 2007.
99. Weggel, J.R. (2007) "Application for Letter of Map Revision (LOMR), Appendix I, Venice One Analysis Results," prepared for Stephen Varenhorst Architects, 1100 East Hector Street, Suite 313, Conshohocken, PA, 15 June 2007.
100. Weggel, J.R. & J. Martin (2006) "Seawall Improvement, Goldschmidt Property, 95 Inlet Drive, Block 5.10, Lot 1, Avalon, NJ 08202, letter report prepared for Graham, Curtis and Sheridan, 4 Headquarters Plaza, Morristown, NJ 07962, 11 September 2006.
101. Weggel, J.R. (2007) "Paradise Park, NJ, FEMA Regulations and Flood Damage Prevention Ordinance, O-99-11, Highlands, NJ." letter report prepared for William Eaton, Esq., Korona, Biedes & Eaton, LLC, 40 First Avenue, P.O. Box 525, Atlantic Highlands, NJ 07716-0525, 2 January 2007.
102. Weggel, J.R. (2007) "Evaluation of Beach and Dune Conditions at 4003 South Long Beach Boulevard, Holgate, Long Beach Island, New Jersey (Tax Block 1.49, Tax Lot 4 - O'Sullivan Property)," prepared for Ballard, Spahr, Andrews & Ingersoll, LLP, Plaza 1000, Suite 500, Main Street, Voorhees, NJ, 17 April 2007.
103. Weggel, J.R. (2007) "Evaluation of Beach and Dune Conditions at 5905 Ocean Boulevard, Brant Beach, Long Beach Island, New Jersey (Tax Block 15.46, Lot 3 - Mastrocola Property)," prepared for Ballard, Spahr, Andrews & Ingersoll, LLP, Plaza 1000, Suite 500, Main Street, Voorhees, NJ, 23 April 2007.
104. Weggel, J.R. (2007) "Evaluation of Beach and Dune Conditions at 19th Street and the Boardwalk, Ocean City, New Jersey, (Block 1901, Lots 8, 8.01 & 10 - Schilling Estate)," prepared for Ballard, Spahr, Andrews & Ingersoll, LLP, Plaza 1000, Suite 500, Main Street, Voorhees, NJ, 4 February 2007
105. Weggel, J.R. (2006) "Drainage Conditions at 1414 Ponds Edge Road, Westtown Township, West Chester, PA," letter report prepared for Mr. Earl Hill, 1414 Ponds Edge Road, West Chester, PA 19382, 26 October 2006.

106. Weggel, J.R. (2006) "Trends in Shipping, Dredging Technology and in Wharf and Pier Construction in the Years Surrounding 1905 with Emphasis on the Delaware River and Bay," prepared for the State of New Jersey, Office of the Attorney General, Division of Law, 25 Market Street, Trenton, NJ, 26 October 2006.

107. Weggel, J.R. (2007) "The Impact of M & M Quarry Operations on Telford Borough Authority's Water Supply Well #4 and Nearby Private Water Supply Wells," prepared for Post & Schell, Attorneys at Law, Four Penn Center, 1600 John F. Kennedy Boulevard, Philadelphia, PA 19103, 28 March 2007.

108. Weggel, J.R. (2006) "Analysis of the 28 June 2006 Flood at R & S Import Motors, Fort Washington, PA," prepared for White & Williams LLP, One Liberty Place, Suite 1800, Philadelphia, PA 19103, 28 September 2006.

109 Weggel, J.R. (2008) "The Effect of a Proposed Bulkhead on a Restored Wetland at Block 127, Lot 507.01, North Wildwood, NJ, McKernan Property" prepared for J. Timothy Kernan, Inc. Kingsway Commons, Suite 100, 935 Kings Highway, Thorofare, NJ 08086, 19 April 2008

110. Weggel, J.R. (2008) "Shoaling and Circulation Improvement at the West End Boat Club Marina, Essington, PA" prepared for West End Boat Club, Essington, PA, 13 May 2008

111. Weggel, J.R. (2009) "An Investigation of the Feasibility of Moving the Dune Line Seaward between Jasper and Hayes Avenues in Strathmere, Upper Township, Cape May County, New Jersey," prepared for Mr. Vincent Sansone and Ms. Bette Jean Yank, 8 November 2009.

112. Weggel, J.R. (2009) "The Cause of Flooding on Sunday, 2 August 2009 at the Condor Automotive Site in Dresher, PA." Prepared for Matthiesen, Wickert & Lehrer, S.C., Harford WI, 14 October, 2009.

11. Schuman property, Ocean City, NJ.

113. Weggel, J.R. (2010) "Review of Proposed New Revetment and Augmented "Revetment" Design at 325 Atlantic Boulevard, Ocean City, NJ," and "Second Review of Proposed New Revetment and Augmented 'Revetment' Design at 325 Atlantic Boulevard, Ocean City, NJ," letter reports prepared for Hyland Design Group, Ocean City, NJ, 5 May 2010.

123. Weggel, J.R. (2010) "Evaluation of Dune Conditions at 5 Beach Avenue, Villas, New Jersey, (Block 319, Lot 1.02 -Arena Property," prepared for Dr. Kathleen Arena, 5 Beach Avenue, Villas, NJ, 18 August 2010.
124. Weggel, J.R. (2008) "Conceptual Design of Two Alternative Shore Protection Schemes for Seabreeze, Fairfield Township, Cumberland County, New Jersey," prepared for Seabreeze Homeowners Association, Seabreeze, NJ, 14 September 2008
125. Weggel, J.R. (2008) "Breakwater Conceptual Design, Including Wave and Ice Analysis, Seaboard Landing Marina, Pennsgrove, NJ" prepared for: Seaboard Landing, L.L.C. 807 Bay Avenue, Somers Point, NJ 08224, 10 March 2008
126. Weggel, J.R. (2008) "Seaboard Landing Marina, Dredging Analysis," prepared for: Seaboard Landing, L.L.C. 807 Bay Avenue, Somers Point, NJ 08224, 10 March 2008.
- 127 Weggel, J.R (2008) "Sedimentation the Vicinity of Pier 25 North, City of Philadelphia" letter report prepared for Marathon Engineering & Environmental Services, Inc., Swedesboro, New Jersey 08085, 25 January 2008
128. Weggel, J.R. (2008) "Wave and Water Level Climate at the Snug Harbor Marina Site, Cape May Harbor, Cape May, New Jersey," prepared for J. Timothy Kernan, Inc., Thorofare, NJ 08086, 3 November 2008
129. Weggel, J.R. (2009) "Bulkhead on Property at 40 Waterway Road, Ocean City, NJ," letter report prepared for Mr. Michael Lorenz, Cherry Hill, NJ 08002, 14 August 2009
130. Weggel, J.R. (2009) "Fort Washington Volvo, Claim #CMINT1036028" letter report prepared for Matthiesen, Wickert & Lehrer, S.C., Hartford, WI 53027-0670, 20 October 2009.
131. Weggel, J.R (2013) "Shore Protection Evaluation and Recommendation at 47 Bay Breeze Drive, Toms River, NJ, Block 295, Lot 1, Calderon Property," report prepared for Dr. Dawn Calderon, Toms River, NJ, 30 September 2013.
132. Weggel, J.R (2013) "Structural Modification of the 11th Avenue Groin at Longport, NJ, report prepared for the Borough of Longport, NJ, 23 October 2013.

INVITED LECTURES:

- Lehigh University
- University of Illinois
- University of Florida
- University of Maryland
- University of Delaware
- Old Dominion University
- Rowan University
- Marine Board, National Academy of Sciences
- US Army, Coastal Engineering Research Board
- Widener University
- University of Pennsylvania
- Temple University
- ASCE Geo Institute: Coastal Processes – March 2006.
- Drexel University, CAEE Seminar Series – “Sand Transport by Wind and Predicting Rates of Dune Growth”
- Nicholas Kraus Symposium, Melbourne, FL
- Polytechnic University of Madrid, Spain – five lectures on various aspects of sea level rise, June 2010
- Alumni Lecture, Department of Civil, Architectural & Environmental Engineering, Drexel University – 3 May 2012

SHORT COURSES PRESENTED:

- Coastal Structures - American Society of Civil Engineers
- Coastal Engineering Workshop - Drexel University
- An Introduction to Coastal Engineering for Non-Engineers - Coastal Zone '89
- Coastal and Dredging Applications of Geotextile Tubes – Geosynthetics 2007 Conference, Washington, DC, 15 January 2007.
- Coastal and Dredging Applications of Geotextile Tubes – GeoAmericas 2008 Conference, Cancun, Mexico, 2 March 2008.
- Ethics – ASCE Coastal, Oceans, Ports & Rivers Institute Congress, Memphis, TN, November 2010
- Ethics Workshop – The Philadelphia Engineers Club, 23 April 2013.

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2900 Fire Road, Suite 200
Egg Harbor Township, New Jersey 08234
609-926-3300

Attorneys for Plaintiff

SANDRA SMITH, INDIVIDUALLY AND AS EXECUTRIX OF THE ESTATE OF GEORGE BRADLEY SMITH, AND AS GUARDIAN AD LITEM FOR HER CHILDREN KOLE SMITH AND BRANDY SMITH, NICOLE GAETA, KYLE SMITH;

Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION-CAPE MAY COUNTY
DOCKET NUMBER: L-

Civil Action

**CERTIFICATION OF
J. RICHARD WEGGEL, Ph.D., P.E., D.CE**

I, J. Richard Weggel, Ph. D., P.E., D.CE, of full age, hereby certify the following:

1. In the event that a hearing is scheduled and I am asked to appear in Court to provide testimony in support of this Order to Show Cause, I shall utilize the attached aerial photographs in support of my testimony.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

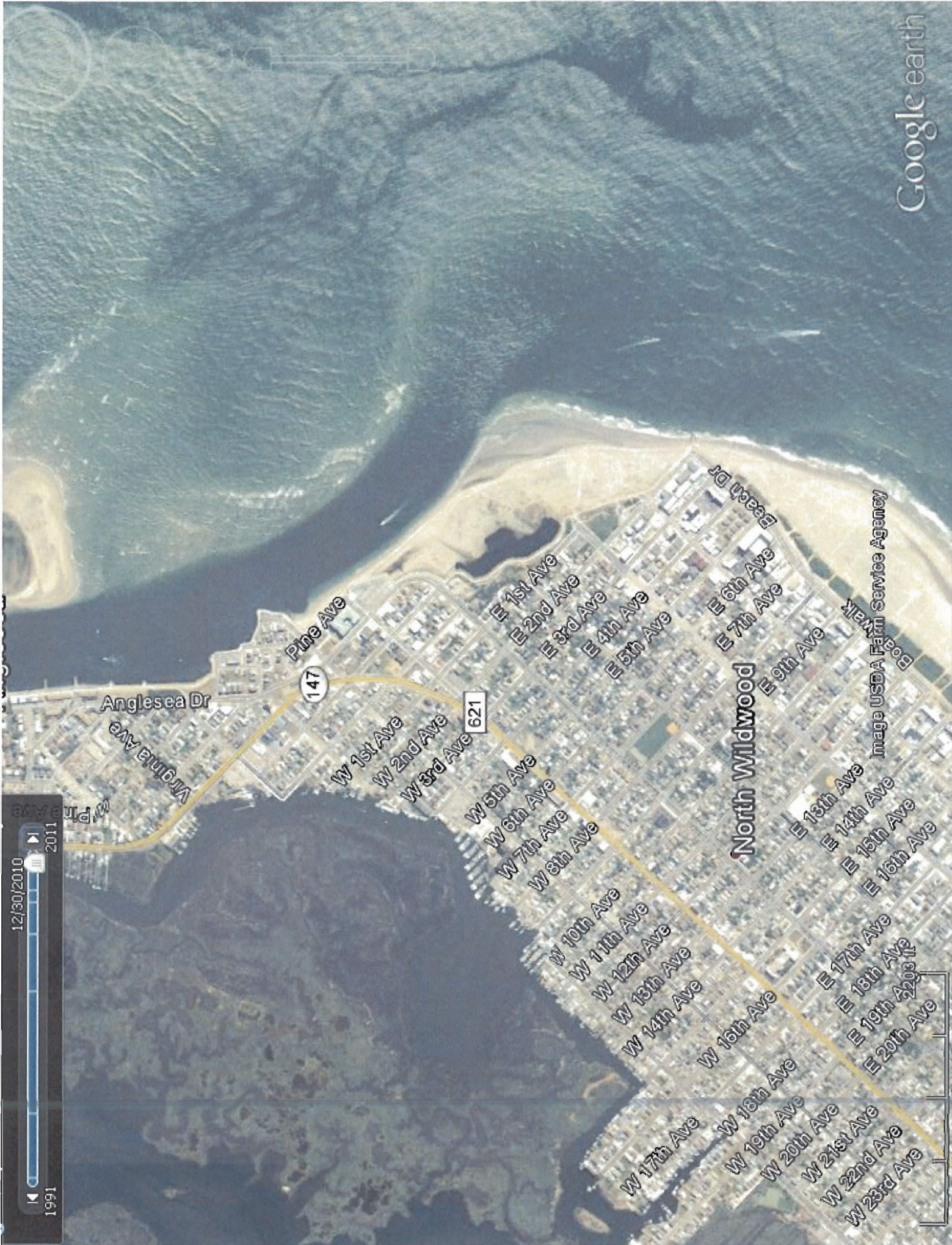


J. Richard Weggel

Dated: 30 Sept., 2016



Image USDA Farm Service Agency
Image © 2016 DigitalGlobe



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North Wildwood

Image USDA Farm Service Agency

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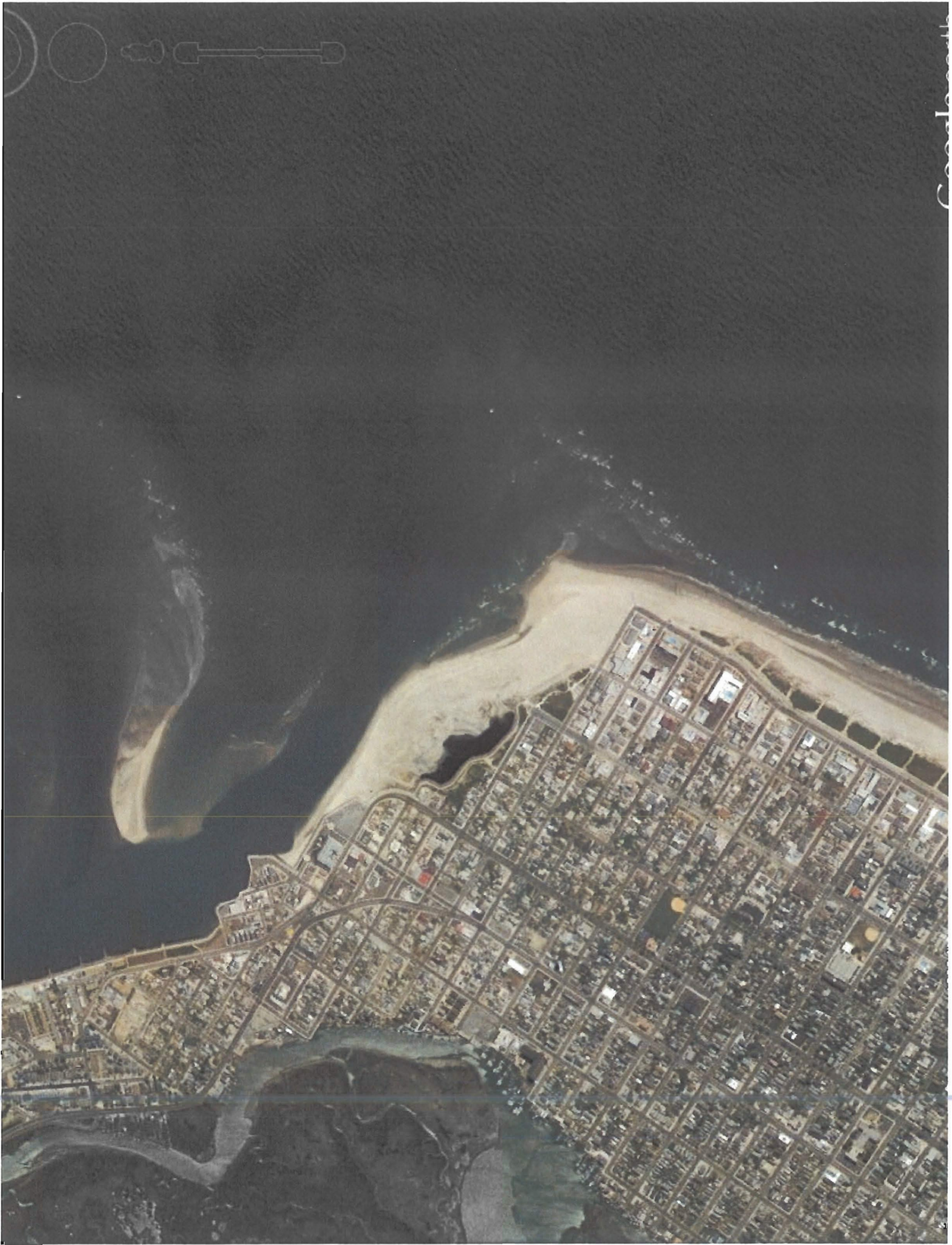
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Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

**SUPERIOR COURT OF NEW JERSEY
LAW DIVISION-CAPE MAY COUNTY
DOCKET NUMBER: L-**

Civil Action

**CERTIFICATION OF
MICHAEL C. MASLOWSKI**

I, Michael C. Maslowski, of full age, hereby certified the following:

1. I am a retired New Jersey State Police Trooper 1.
2. I was a member of the New Jersey State Police for 25 years,
3. I was trained in Marine Law Enforcement by the New Jersey State Police.
4. I was previously assigned to the North Wildwood New Jersey State Police Marine Station.
5. I have received various advanced Marine Law Enforcement training.
6. I navigated and patrolled the area of Hereford Inlet for Approximately 10 years while I was a New Jersey State Trooper.
7. I have assisted the North Wildwood Police and the United States Coast Guard with several water rescues and drowning incidents in the area of the Inlet Beach.

8. There were approximately 2-3 rescues that I was personally involved in from the area of Hereford Inlet Beach each summer.

9. Beach Patrons swim and wade at the Inlet Beach during the summer months.

10. A short step off the inlet beach in the wrong direction could cause a person to fall into 30 feet of water.

11. There are several other beach rescues that go unreported each summer at the Inlet Beach.

12. The unreported rescues are performed by civilians utilizing Jet Skis and/or pleasure or fishing boats.

13. I and fellow State Troopers would hear about the rescues after the fact from beach patrons and other emergency rescue personnel.

14. I consider the Inlet Beach very dangerous to beach patrons due to extreme currents and beach erosion.

15. I have seen a vortex type whirlpool that forms near the rock wall at the Inlet Beach when the tides change.

16. I have personally been involved in several water rescues where individuals were caught in the vortex/whirlpool near the Inlet Beach rock wall.

17. I recall fishermen and tourists falling from the rock wall at Inlet Beach and getting sucked into the vortex/whirlpool.

18. I have observed the North Wildwood Police patrolling the Inlet Beach, Moore's Beach, Moore's Inlet Beach, and the Point on foot and ATVs.

19. I have been called by the North Wildwood Police to patrol in the Inlet Beach regarding jet skiers into the Inlet Beach.

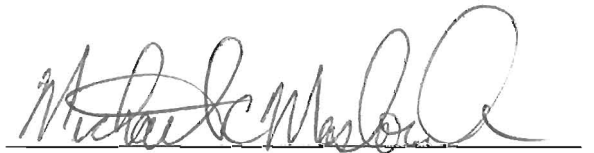
20. I would not allow my children to wade or swim at the Inlet Beach.

21. There is a drop off right off of the Inlet Beach and it is very dangerous to wade or swim.

22. Hereford Inlet is not charted for navigation by the Army Corp of Engineers because it is constantly changing and is dangerous.

23. I believe that the violent incoming/outgoing current from Hereford Inlet undermined the beach creating a pocket under Brad Smith's feet which collapsed.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Michael C. Maslowski

Dated: 9/28, 2016

D'AMATO LAW FIRM

By: Paul R. D'Amato, Esquire - NJ ID# 006901974
Kasi M. Gifford, Esquire - NJ ID# 152582015

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**SANDRA SMITH, INDIVIDUALLY AND AS
EXECUTRIX OF THE ESTATE OF GEORGE
BRADLEY SMITH, AND AS GUARDIAN AD
LITEM FOR HER CHILDREN KOLE SMITH
AND BRANDY SMITH, NICOLE GAETA, KYLE
SMITH;**

Plaintiffs,

-vs-

**CITY OF NORTH WILDWOOD, STATE OF
NEW JERSEY;**

Defendants.

THUMB DRIVE
TABLE OF CONTENTS

1. Exhibit "A": Scott Sunderland's Depositions Transcript
2. Exhibit "B": Brandy Smith's Deposition Transcript
3. Exhibit "C": Chief Joseph Anthony ("Tony") Cavalier of the North Wildwood Beach Patrol's Deposition Transcript
4. Exhibit "D": Article from Shorenewstoday.com entitled "Guard Warns about Swimming in Inlet."
5. Exhibit "E": Lieutenant David Lindsay of the North Wildwood Beach Patrol's Deposition Transcript
6. Exhibit "F": The transcript of the recorded conversation between Mrs. Simpson and Lieutenant Lindsay
7. Exhibit "G": Select Sections of the Deposition Transcript of Louis Belasco.

D'AMATO
LAW FIRM

COUNSELORS AT LAW
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8. Exhibit "H": Select Sections of the Deposition Transcript of Carl Delinksi, Jr.
9. Exhibit "I": Select Sections of the Deposition Transcript of Chief Matthew Gallagher of the North Wildwood Police Department.
10. Exhibit "J": Mayor of North Wildwood, Patrick Rosenello's Deposition Transcript
11. Exhibit "K": Select Sections of the Deposition Transcript of Stephen DeHorse, Jr.
12. Exhibit "L": September 26, 2012, article from the Cape May County Herald.
13. Exhibit "M": The Hereford Inlet Light House Information Packet
14. Exhibit "N": December 17, 2013, report by the U.S. Army Corps of Engineers regarding the Hereford Inlet.
15. Exhibit "O": Certification of Michael C. Maslowski
16. Exhibit "P": North Wildwood New Jersey 2016 Information and Recreation Guide
17. Exhibit "Q": North Wildwood Police Department Investigation Report from July 13, 2009, regarding the Hart and Watkins drownings
18. Exhibit "R": The Deposition Transcript of Domonique McNeil.
19. Exhibit "S": USA Today article entitled "Things to do in North Wildwood, NJ."
20. Exhibit "T": The Certifications executed by Professor Weggel which include Report, Addendum Report, and Curriculum Vitae, as well as photographs which Professor Weggel will utilize if asked to testify at a hearing.

21. Exhibit "U": A photograph of the Unprotected Inlet Beach taken on June 16, 2014, depicting people utilizing the beach for sunbathing, walking, and playing in the water.
22. Exhibit "V": A photograph of people swimming in the water off of the Unprotected Inlet Beach
23. Exhibit "W": A photograph dated June 16, 2014, of adults and young children standing at the water's edge on the Unprotected Inlet Beach
24. Exhibit "X": A photograph dated June 16, 2014, depicting people sunbathing, fishing, running, and walking on the Unprotected Inlet Beach.
25. Exhibit "Y": A photograph of beachgoers on the Unprotected Inlet Beach
26. Exhibit "Z": An Excerpt from The Press of Atlantic City dated September 27, 2016, entitled "A Great Day for a Seawall Stroll." The picture is described as depicting, "Fishermen line the beach at Hereford Inlet adjacent to the seawall at New York Avenue."
27. Exhibit "A-1-A-14": Still photographs captured by drone of the Hereford Inlet on July 31, 2014
28. Exhibit "B-1": Video captured by drone of the Hereford Inlet on July 31, 2014
29. Exhibit "C-1": Photographs provided by the Cape May County Planning Department depicting the aerial views of the Hereford Inlet from 1920 to February 22, 2013.
30. Exhibit "D-1-D-243: Aerial Photographs taken from Helicopter over the Hereford Inlet on March 1, 2016

31. Exhibit "E-1": A photograph illustrating two City of North Wildwood Police Officers Patrolling the beach on June 20, 2014
32. Exhibit "F-1": A photograph illustrating City of North Wildwood Public Works employees working on the Inlet Beach on June 20, 2014.
33. Exhibit "G-1": rescue/drowning reports for the years 2010-2015 comprised of data compliments of North Wildwood Police Department, North Wildwood Beach Patrol., and North Wildwood Fire Department.
34. Exhibit "H-1": North Wildwood Resolutions designating the Lifeguard Protected Beaches from the years 2004 to 2011.

D'AMATO LAW FIRM^{P.C.}

Paul R. D'Amato
CERTIFIED BY THE SUPREME
COURT OF NEW JERSEY
AS A CIVIL TRIAL ATTORNEY
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October 4, 2016

Clerk, Law Division
Cape May County Superior Court
9 North Main Street
Cape May Court House, New Jersey 08210

RE: SMITH V. CITY OF NORTH WILDWOOD, ET AL.
OUR FILE NUMBER |3100-P

Dear Sir/Madam:

Enclosed you will find the following:

- (XX) An original and copy of the Verified Complaint
- (XX) Case Information Statement; and
- (XX) Self-addressed stamped envelope
- (XX) Brief
- (XX) Certification of Kasi M. Gifford, Esquire
- (XX) Certification of J. Richard Weggel, Ph.D., P.E., D.CE
- (XX) Certification of Michael C. Maslowski
- (XX) Order to Show Cause
- (XX) Table of Contents
- (XX) Thumb Drive Containing Exhibits

Would you please:

- (XX) File, and
- (XX) Return a filed copy

Please charge our Attorney Collateral Account for any related costs, #19125.

Thank you kindly for your time and attention to this matter.

Very truly yours,

Paul R. D'Amato

PAUL R. D'AMATO

Enclosures

cc w/enc.: Sandra Smith
Nicole Gaeta & Kyle Smith
Honorable Julio L. Mendez, A.J.S.C.

tab 1

D'AMATO LAW FIRM

**By: Paul R. D'Amato, Esquire - NJ ID# 006901974
Kasi M. Gifford, Esquire - NJ ID# 152582015**

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SANDRA SMITH, INDIVIDUALLY AND AS EXECUTRIX OF THE ESTATE OF GEORGE BRADLEY SMITH, AND AS GUARDIAN AD LITEM FOR HER CHILDREN KOLE SMITH AND BRANDY SMITH, NICOLE GAETA, KYLE SMITH;

Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

SUPERIOR COURT OF NEW JERSEY
CAPE MAY COUNTY - LAW DIVISION

DOCKET NUMBER: CPM-L-

A CIVIL ACTION

VERIFIED COMPLAINT

Plaintiffs Sandra Smith, individually and as executrix of the estate of her late husband George Bradley Smith (hereinafter "Brad Smith"), and as Guardian Ad Litem for Her Children Kole Smith and Brandy Smith, Nicole Gaeta, and Kyle Smith, the adult children of George Bradley Smith, residing in Pennsylvania, by way of Verified Complaint bring this action for injunctive relief seeking to have the North Wildwood beach in the area of Hereford Inlet permanently closed to the public from Surf Avenue and the beach to Spruce Avenue and the beach at the sea wall.

FACTS

1. At all times relevant, Defendants, the City of North Wildwood and the State of New Jersey, through their agents, servants, and/or employees, owned, operated, managed, controlled, and supervised the beaches along the North Wildwood Atlantic Ocean coast line, which include the Hereford Inlet Beach, the Inlet Beach, Moore's Beach, Moore's Inlet Beach, and the Point (hereinafter "Unprotected Inlet Beach"), and the bathers, sun bathers, strollers, and waders invited to visit and use those beaches.

2. On July 27, 2012, the decedent George Bradley Smith (hereinafter "Brad Smith"), his wife Sandra, his children Brandy and Kole went to the North Wildwood beach located at Surf Avenue. The Smiths were accompanied by Scott Sunderland, his wife, and their two young children. This beach was protected by lifeguards employed by the City of North Wildwood.

3. Brad Smith with his daughter Brandy, Scott Sunderland, and his two children decided to go for a walk which took them north along the shoreline.

4. To the North of the last lifeguard stand located at Surf Avenue is a beach referred to as the Inlet Beach, Moore's Beach, Moore's Inlet Beach, and the Point.

5. During this walk Brad Smith, Scott Sunderland, and their daughters encountered a drop off which was not visible because it was under the water.

6. Because of this drop off, which was as steep as a cliff, the Smiths and Sunderlands although only wading, suddenly fell into deep water which was far over their heads.

7. Scott Sunderland was able to return to land with his daughter on his back.

8. After reaching land, Scott Sunderland flagged down two jet skiers, one of whom was able to save Brandy Smith.

9. On April 1, 2016, Scott Sunderland at his deposition in a related companion case testified as follows:

Q: Okay. Now, from the time you started walking from the protected beach onto that area that was unprotected—well, let's go back a little bit. Going back to the day of the accident, before you decided to take the walk, as you have described many times today, towards Moore's Beach or Moore's Inlet, did you know that the area that you are walking—about to walk on was unprotected in the sense that there were no lifeguards down there?

A: No, we didn't.

Q: On the day of Brad's drowning, was that the first time that you and Brad had ever walked from the protected beach down towards Moore's Inlet or Moore's Beach?

A: Yes, that was the first time we walked down there.

Q: As you were walking from the protected beach towards Moore's Beach, did you see signs on poles like what is shown in Sunderland-22?

A: No.

Q: Okay. As you are walking from the protected beach to Moore's Beach, did you see any signs like what is shown in Sunderland-23 which says "High risk rip current area"?

A: No.

Q: As you are walking from the protected beach towards Moore's Beach, did you see any signs like Sunderland-24 that say, "Danger, Unprotected Beach"?

A: No.

Q: As you are walking from the protected beach to Moore's Beach, are you seeing any signs like whatever this thing is in Sunderland-25 in the middle of the photograph?

A: No.

See Sunderland Dep. 35:8-10.

Q: And how deep is the water on you just before you go into the water?

A: Calf

See Sunderland Dep. 35:8-10.

Q: As you were walking along, I think you said roughly calf-deep water?

A: Um-hum

Q: Is that a yes?

A: Yes, I would say top of my calf.

See Sunderland Dep. 130:4-131:15.

Q: Were you making any attempt to walk in an absolute straight path, or were you just ambling along and you fell?

A: We were just walking along the water.

Q: Because here's my question. Since you were not making an attempt to walk in an absolute straight line, is it possible that as you approach the location of the incident you were stepping a little bit to the right here a little bit to the left there?

A: Yeah, I mean we could have, but we were never deeper than the top of my calf.

See Sunderland Dep. 114:21-115:6.

Q: You are heading back. And were there times as you are walking back before you fell into the hole that all of you or some of you were walking in ankle-deep water as opposed to mid-calf water?

A: Yes.

See Sunderland Dep. 129:23-130:3.

Q: As you are walking in the fashion as well as you can describe it based on your memory, do you remember what happened, how you felt and what happened to you as you found yourself going in this water?

A: As I was walking, I took a step on my left leg and it just dropped.

Q: You mean your left leg went out and you went...

A: No, just like I was walking and then it's just like I just stepped right into, like, nothing. It was like it almost slide, like it slipped, and then with that I just went over. So it was like my leg just went out from underneath me.

See Sunderland Dep. 36:16-37:5.

...

Q. And what did you see when you had that observation [seeing Brad and Brandy]?

A: They were separated. And I'm going to approximate they were off the beach about a hundred, 120 feet.

Brandi was closer to inside the inlet, Brad was closer to

the ocean, and they were getting further apart. Brandi was staring directly at me, and Brad was on his back facing Brandi, so looking back towards the inlet. And he was just kind of almost—almost on his back like just going with the current. And it seemed like Brandi was stuck in this—she wasn't getting turned around in like a whirlpool. She was on this outer side of it, and then it seemed like Brad was caught in this other—almost like a river and he was getting pulled further away from her. See Sunderland Dep. 41:20-42:12.¹

10. Attached hereto and made a part hereof as Exhibit "A" is a true and accurate copy of the complete transcript of the deposition of Scott Sunderland.

11. On March 10, 2016, Brandy Smith at her deposition in a related companion case testified as follows:

Q: and were you and your dad at—walking in the water?

A: Yes. Like, we—it was only, like, to our ankles, at first, yeah. It was, like, we were still, like, right here, close to the sand, so you could, you had your feet on sand for a while you were walking.

Q: Um-hum. And there came a time when you and your dad somehow went into the water. Right?

A: Yeah.

Q: How did that happen?

A: I can't remember much, but like—how it happened, I—my eyes were closed, and I didn't know—like, I couldn't see anything much. And—and it just happened. And then we ended up somewhere in the ocean.

See Smith Dep. 21:5-19.

...

Q: All right. After you fell into the water, okay, do you remember seeing your dad at any time, after you fell into the water?

A: Yes.

Q: And do you—and where was he? How far was he from you?

A: He was pretty close. Just like a little bit far away from me, not that far.

Q: Okay. Was he saying anything to you?

¹ The correct spelling of Brad Smith's daughter's name is "Brandy". However, the spelling "Brandi" was inadvertently used in some deposition testimony, and has been referenced as such to maintain the word-for-word integrity of the deposition testimony.

A: Yes he was saying my name a lot. And then I don't remember much about—all I remember was him saying my name.

Q: Okay. And you remember the fellow on the Jet Ski picking you up?

A: Yes.

Q: All right. When the fellow on the Jet Ski picked you up, where was your daddy at that point in time?

A: I didn't see him anymore. I don't know—I didn't know where he was.

Q: All right. When you last saw daddy, what was he doing?

A: Laying on his back.

Q: Okay. Do you see how long this conference room is here?

A: Yes.

Q: Was he as far away from you as the length of this room, or more, or closer?

A: Closer.

Q: Okay. And what's the very last words you remember hearing daddy say?

A: Brandy.

See Smith Dep. 29:19-30:25.

12. Attached hereto and made a part hereof as Exhibit "B" is a true and accurate copy of the complete transcript of the deposition of Brandy Smith.

13. Brad Smith struggled to stay afloat and was sucked beneath the sea as a result of the vortex also known as the whirlpool.

14. Brad Smith's body was recovered on the beach during the early morning hours of July 30, 2012.

15. On February 16, 2016, Chief of the North Wildwood Beach Patrol since 1986, Joseph Anthony "Tony" Cavalier (hereinafter "Chief Cavalier") in the related companion case testified as follows:

Q: Okay. If I said to you, what is your understanding of what happened to Mr. Smith, do you have one?

A: How I think it happened?

Q: Yes.

A: Yes.

Q: Okay. And before you tell me how you think it happened, can you tell me the following: You didn't see it happen; did you?

A: No.

Q: All right. All right. So, you're basing your forthcoming answer as to how it happened based on what?

A: Being down there all the time.

Q: Okay. So, why don't you tell me how you think it happened.

A: At certain times of the day, when the tide is in or out, there's a drop off along that section of the beach,

Q: Okay. What do you mean by a drop off?

A: It literally drops off.

Q: Okay. And how long has that particular condition existed as far as you know?

A: The inlets changing all the time. Every year, it changes.

See Cavalier Dep. 41:20-42:19.

16. Attached hereto and made a part hereof as Exhibit "C" is a true and accurate copy of the deposition transcript of Chief Cavalier.

17. When questioned about his knowledge of the drop off, Chief Cavalier testified as follows:

Q: ... the drop off runs how---how far, or how long is it?

A: Twenty yards.

Q: Okay. And is that drop off, and I know you said this, but I'm kind of having difficulty understanding it. Is every season that drop off someplace along that Inlet Beach?

A: Yes.

Q: Okay. Does the drop off, season to season, move?

A: Yes.

Q: Okay. And all the years that you've been part of the North Wildwood Beach Patrol, is this drop off, does it, like, move from, let's say Point A, and then the next year, it's like a mile away, or is there a certain limitation that it stays within?

A: Limitation.

Q: And what would you say that is? Like, is it, like a quarter of a mile, a tenth of a mile that it moves?

A: Tenth of a mile.

See Cavalier Dep. 56:5-25.

Q: Okay. Were there any signs on July 27, 2012, that would have alerted Brad Smith as to this drop off?

A: No.

See Cavalier Dep. 58:8-11.

18. Chief Cavalier was asked whether or not there would have been any signs at the water's edge warning of the hazardous conditions. Chief Cavalier responding in the negative testified:

Q: Now, you do have an understanding that Mr. Smith and his family and the Sunderland family had been sitting on a protected beach on July 27, 2012, and had—and that Mr. Sunderland with his son, and Mr. Smith and his daughter decided to take a walk on the beach? Are you aware of that?

A: No.

Q: Okay. As they are walking from the protected beach, you would call it the last one, First and Surf. Right?

A: Yes.

Q: As they're walking, and they're going towards Moore's Beach, would there be any sign warning them of any hazardous condition located near the water's edge, as they're walking?

A: No.

See Cavalier Dep. 72:13-73:3.

19. Furthermore, when Chief Cavalier was asked about the visibility of the drop off he testified as follows:

Q: Okay. When you referred to the drop off earlier in your testimony, does this photograph show what you call a drop off?

A: No.

Q: Okay. How is a drop off different than the photograph that you have in your hand?

A: It's along the water's edge. It's in the water.

Q: So, that—wait. Okay. When you say it's in the water, so that if I'm standing on land, I can't see the drop off, correct?

A: Yes.

Q: Okay. That area that's shown in that photograph, is that Moore's Beach?

A: No.

Q: Is that Inlet Beach?

A: Yes.

See Cavalier Dep. 82: 23- 83:16.

20. Moreover, Chief Cavalier when asked if this drop off is consistently present, testified regarding the details of the drop off as follows:

Q: All right. Virtually, all the questions I'm going to be about that drop off. Because I want to try to understand where that drop off is, how it occurs. And you've indicated that it moves along with the shore line. Is that right?

A: Yes.

Q: So that's a dynamic process?

A: Yes.

Q: But that it is relatively constant, and they're not your words, so that it's a feature that, that while it moves, it doesn't really go away; does it?

A: No.

Q: It doesn't move from day to day; does it?

A: Yes. The Inlet changes every day.

Q: Okay.

A: The currents.

Q: Okay. Does the drop off change during the tide?

A: Yes. Certain tides, there is no drop off.

Q: Okay. What kind of tides is there no drop off, and what kind of tides is there a drop off?

A: High tide. High tide, it's a regular beach.

Q: Okay. And that's because the drop off—

A: Would be the further out.

Q: --is so far out that you couldn't walk to it?

A: Correct.

See Cavalier Dep. 111:6-112:15.

A: When the water is out is when there is a drop off. See Cavalier Dep 113:9-10.

Q: Okay. Do you know whether the currents are scouring that Point, that Lindsay calls a Point?

A: I believe it scours the whole Inlet Beach, the way the currents run, not just there.

See Cavalier Dep 118:15-21.

21. Chief Cavalier further testified:

Q: Okay. Well, when the drop off appears, how big an area is it?

A: Ten, fifteen yards.

Q: Okay. And how—how—what's the drop? In other words, if someone is walking, and they encounter the drop off, how far will they step down?

A: Over their head.

Q: Okay. All right. So, it's sort of a cliff?

A: I don't consider it that.

Q: Okay.

A: It's when the tide's out, it's just the water drops off.

Q: All right. It's a sudden drop off?

A: Yes.

See Cavalier Dep 119:1-17

22. When questioned as to whether or not the drop off was a factor in the Smith drowning, Chief Cavalier explained:

Q: Would I encounter the drop off—in this case, the Sunderland version is that Smith, Sunderland and the children were walking in ankle deep water, parallel to the beach.

A: Yes.

Q: Okay. And two of them just fell away, the beach fell away. And you indicate, you theorized they fell in the drop off?

A: Yes.

Q: Okay. What I'm trying to understand is, would the drop off have been running along the beach, and they got too close to it and slide from the side, or would they have encountered a drop off that ran perpendicular to the direction they were walking? Do you understand what I'm asking you?

A: Do you want me to explain how I think?

Q: Yeah, I do. Yeah. Very much.

A: They were walking along, and they came to the spot where it's—I call a drop off, and it was over their head, and they stepped into it.

See Cavalier Dep. 120:20-121:25.

23. Chief Cavalier clarified that the drop off is discussed by other lifeguards amongst themselves, and is recognized as a risk to beachgoers, even those who are simply walking at the water's edge:

Q:...and do you discuss where the drop off is with any of your personnel during the course of a summer?

A: No.

Q: Do they discuss it with you?

A: Yes.

Q: Okay. So, the drop off is a phenomenon that the guards will discuss—

A: Yes.

Q: --amongst themselves? And you recognize it as a risk?

A: Yes.

...

Q: You understand that the drop off is a risk to people who are using the beach?

A: Yes

Q: And you recognize that it's a risk that comes up to someone who is simply walking, not swimming?

A: Yes.

See Cavalier Dep. 122:7-123:4.

24. Chief Cavalier has recognized this risk for ten years, Chief Cavalier explained why he has recognized this risk for ten years at his deposition:

Q: Is that correct? And how long have you recognized that risk?

A: Ten years.

Q: What caused you to recognize that risk 10 years ago?

A: Some of the rescues we had down there (emphasis added).

Q: Okay. Can you tell me which—what rescues you had, and where they would be documented, that led you to recognize that risk?

A: No. I—it's my own personal experience of going down there, and looking at it.

See Cavalier Dep. 122:7- 123:16.

25. Chief Cavalier makes recommendations to the North Wildwood Mayor and Council regarding which beaches should be guarded every summer. Chief Cavalier described the process as follows:

Q: Okay. I have read a series of resolutions that were passed by the City of North Wildwood relative to what beaches would be protected for an upcoming summer season. And you're probably familiar with those resolutions; aren't you?

A: Yes.

Q: Right. And all the resolutions, there's a reference to the council and the mayor having considered the recommendations of the North Wildwood Beach Patrol?

A: Yes.

Q: All right. Were those recommendations given to the mayor and the counsel of North Wildwood on an annual basis, like every year?

A: Yes.

Q: And were they typically given a couple months before the beginning of the summer season?

A: A month.

Q: Okay. And were your recommendations that are referenced in the resolutions in writing from you to the mayor and council?

A: Yes.

See Cavalier Dep. 27:25-28:1-21.

26. Chief Cavalier noted that the drop off is present every year, he explained that there are two drop offs and compared the two as follows:

Q: The drop off is, is present every year; isn't it, someplace or other?

A: Yes.

See Cavalier Dep. 131:25 – 132:1.

Q: Okay. Okay. The drop off that we've been talking about is typically how deep?

A: Ten.

Q: Okay. And are there other areas along bay of these beaches where there are other drop offs?

A: Yes.

Q: Okay. Are those drop off, can they be as deep as 10 feet, also?

A: 50 feet. 50 to 60 feet.

Q: Okay.

A: That's the drop off at Moore's Beach, where they fish.

See Cavalier Dep. 133:20- 134:6.

27. Chief Cavalier acknowledged that the drop off was present at the location of the Smith drowning on July 27, 2012, when he testified as follows:

Q: Okay. So if I follow you correctly, the drop off, when the drowning occurred, was at the Point, and it was about 10 or 15 feet deep?

A: Yes.

See Cavalier Dep. 135:20-23.

28. Chief Cavalier was also personally aware of the vortex or whirlpool and explained his knowledge as follows:

Q: Okay. He [Dr. Stewart Farrell] also says that when the back bay is going into the ocean, that there is a vortex or whirlpool in the body water called the Inlet?

A: Yes.

Q: All right. Given the number of years that you have been on the beach patrol, is that vortex or whirlpool created every time the back bay moves out to the ocean?

A: Yes.

Q: All right. I know you're not a research scientist, but what is your understanding of what causes the whirlpool or vortex?

A: I believe it's the bay hitting the ocean at that point.

See Cavalier Dep.43:15-44:5.

Q: All right. How large is this whirlpool or vortex that you have seen in the past in the Inlet?

A: Twenty-five yards.

Q: Okay. And does it appear to be circular.

A: Yes.

Q: Okay. So, the diameter across would be about 25 yards?

A: Yes. I'm sorry(emphasis added).

See Cavalier Dep.45:4-18.

29. Chief Cavalier was of the opinion that an average swimmer could not swim through the vortex or whirlpool, he stated:

Q: That's okay... Could an average swimmer swim through the vortex?

A: No.

See Cavalier Dep. 45:4-46:25.

Q: Okay. So, at Moore's Beach, before July 27, 2012, was that area consistently 50, 60 feet deep?

A: Yes.

Q: All right. For what length?

A: Twenty yard, twenty-five yards.

See Cavalier Dep. 53:12-16.

Q: Okay. And Dr. Farrell, in one of his statements, and hopefully we can get to it today, he says that sometimes when the back bay is going to the ocean, that the water is moving at five miles per hour, the water that's going out to the ocean.

Q: Would you agree with him?

A: Yes.

Q: Would you agree that it could be more than five miles per hour?

A: Yes.

Q: Ten miles per hour?

A: No, not—not that—

Q: Somewhere between five and ten miles per hour?

A: Yeah.

See Cavalier Dep. 60:16- 61:6.

30. Chief Cavalier acknowledged that the vortex or whirlpool is present in the same location as the drop off:

Q: The vortex that you talked about before, how far is the vortex from the drop off?

A: That's—that's where it is.

Q: Oh, okay. All right. So, the vortex is, is related to—

A: Yes.

Q:-- the drop off? Okay.

See Cavalier Dep. 131:2-13.

31. North Wildwood promotes and encourages the use of Moore's Beach since it built stairs which provide access to the Unprotected Inlet Beach. There are condominiums

present directly over the sea wall at Moore's Beach. The residents of those condominiums have direct access to the Unprotected Inlet Beach. Chief Cavalier testified as follows:

Q: Okay. The individuals that own the condominiums, the actual condominium units, I meant to say, in that condominium building, is there any prohibition from those individuals sunbathing at Moore's Beach?

A: No.

Q: Okay. In fact, there is—there are stairs that people can access from the parking lot to get to Moore's Beach. Correct?

A: Yes.

Q: ... The closest stairs that exist in order for someone to get to Moore's Beach would be the stairs that are located from the parking lot that we see in this particular exhibit. Correct?

A: No.

Q: Where else?

A: Down by the corner at Moore's Beach.

Q: Let me see.

A: All the way down. There's a set of steps that goes right on the beach.

See Cavalier Dep. 51:19 – 52:15.

32. North Wildwood provides and maintains a parking lot in the Hereford Inlet Section, which Chief Cavalier credits for making First and Surf Avenues, a more crowded beach, as noted in the following deposition testimony:

Q:... "Two rescues, guards, Goss and Muso did a good job on controlling the crowd at First and Surf. There are heavy crowds at First Street due to the parking lot." Can you explain what that means that there are heavy crowds due to the parking lot? What's the connection?

A: Well, there's a--- the city made a parking lot, and people come down to the beach and park there, so they go out on First and Surf.

Q: Got it. And from that parking lot that we've been referring to that's next to the condominiums, individuals that park their cars there, can take one set of steps to get right on Moore's Beach?

A: Yes.

33. Chief Cavalier testified that on July 27, 2012, there were no signs on the Unprotected Inlet Beach prohibiting walking in ankle deep water, or walking in water that goes to your mid-calf. See Cavalier Dep. 62:1-8.

34. There are “No Swimming” signs on the Unprotected Inlet Beach. However, these signs were not regularly enforced by the beach patrol, due to the large area of the Unprotected Inlet Beach. Chief Cavalier testified to this fact as follows:

Q: All right. I handed to you exhibit 19, and then I took it back. And you identified the area where this, what is shown this particular photograph, and you would agree that the sign on the top means no swimming?

A: Yes.

Q: All right. And is it fair to say that when you see that sign, it also means it’s not a protected beach?

A: Yes.

Q: Okay. And below, there’s another sign that says, “No dogs, cats, or any other domestic animals on beach May 1 to October 1,” and it references Ordinance No. 1416. Was it the responsibility, before Mr. Smith’s drowning, of the North Wildwood Beach Patrol to enforce the no swimming sign and the no animal sign?

....

A:...you mean, if people are in the water, did we enforce that [no swimming] sign?

Q:Yes.

A: No.

Q: Why not?

A: It’s too big an area to cover (emphasis added).

See Cavalier Dep. 70: 3- 71:10.

35. Though the lifeguards would not regularly enforce the “No Swimming” Signs they did listen to the radio and effectuate rescues on the Unprotected Inlet Beach every summer, as evidenced by Chief Cavalier’s testimony:

Q: All right. The—let’s see if we can do it this way: were there any occasions where North Wildwood lifeguards had to effectuate a rescue of a person that was in the water off of Moore’s Beach?

A:Yes.

Q:.. were there occasions before July 27, 2012, where lifeguards of the North Wildwood Beach Patrol had to effectuate a rescue of someone that was swimming off of what we've been calling the Inlet Beach?

A: Yes.

Q: Okay. From your experience, is it safe to say that in all the years that you have been a member of the North Wildwood Beach Patrol, that before July 27, 2012, there were occasions during the summer season when North Wildwood lifeguards had to effectuate rescues of individuals swimming both off the Moore's Beach and off of the Inlet Beach?

A: Yes.

Q: Okay. Typically, how would your lifeguards be alerted to the fact that they had to effectuate a rescue off of Moore's head—Moore's Beach and the Inlet Beach?

A: Police department, we would monitor the police radio. The police would get a call, somebody's in distress, Moore's or the Inlet, and we would respond.

See Cavalier Dep. 91:10- 92:17.

36. Additionally, Chief Cavalier acknowledged that about a dozen times a summer, the lifeguards must save someone who has tried to swim to Champagne Island, a sand bar, located off of the Unprotected Inlet Beach, Chief Cavalier explained:

Q: Is there any prohibition from a person who's on the Inlet Beach, not Moore's Beach, the Inlet Beach from swimming to Champagne Island? A prohibition.

A: No.

Q: Okay. Is there any prohibition for someone swimming to Champagne Island from Moore's Beach?

A: No.

Q: Okay. How many rescues in a given summer before July 27, 2012, did your lifeguards have to effectuate relative to people who were trying to swim from Moore's Beach and/or the Inlet Beach to Champagne Island and vice-versa?

A: About a dozen a summer.

See Cavalier Dep. 101:5-21.

37. The Beach Patrol Daily Report Dated August 19, 2012, about three weeks after Brad Smith's drowning, states that there were, "Eight Preventions at the Point," Chief Cavalier explained a prevention as follows:

Q: Okay. Now, let me show you what's been marked for identification as Exhibit 44. It's a daily report dated August 19, 2012. And at the bottom, the same category, again, it says, "Eight preventions at the Point." Okay. Now, when it says eight prevents, do that—if you can tell, does that mean preventing eight people from going into the water? What—I don't understand this term prevention.

A: They were trying to stop people from going in the water there.

See Cavalier Dep. 103:6-19.

38. City officials, including Chief Cavalier, have acknowledged in sworn testimony that beach goers who frequent the Unprotected Inlet Beach are inclined to engage in behaviors otherwise prohibited by various North Wildwood Ordinances.

39. Such activities include, but are not limited to, drinking alcoholic beverages on the beach, utilizing floatation devices in the water, playing games, and bringing their dogs to the beach.

40. When asked about any discussions between Chief Cavalier, the Mayor, and City Council regarding whether or not to close the Unprotected Inlet Beach, Chief Cavalier testified as follows:

Q: Was there any discussion while you were the chief of the beach patrol of North Wildwood, before July 27, 2012, at a mayor and council meeting of the City of North Wildwood, about having a lifeguard or lifeguards with lifeguard stands in what we've been calling the Inlet Beach area?

A: No.

Q: Okay. Same question for Moore's Beach... Before July 27, 2012, did you ever attend a meeting of the mayor and council where there was a discussion about

having a lifeguard and a lifeguard, perhaps with a stand, at what we've been calling Moore's Beach?

A: Yes.

Q: Okay. Given the number of years you've been the chief of the beach patrol, can you give me your best estimate as to how many times you spoke to the mayor and council at one of their meetings?

A: About Moore's Beach?

Q: Yea.

A: Once.

Q: Okay. And when was that?

A: Twelve years ago.

Q: Okay. And can you tell me what you said?

A: We had Mayor Palumbo, who was the mayor, a discussion was brought up about should we guard the Moore's Beach again. And the mayor and I went to the beach, and he actually went around asking people how they felt about a lifeguard being back there. And 90 percent of the people didn't want a lifeguard there.

Q: Did they tell you why they didn't want a lifeguard there?

A: They want to be able to do what they want to do.

Q: And one of the things they wanted to do was drink alcoholic beverages?

A: Yes.

Q: All right. What else besides drinking and alcoholic beverages did they want to do?

A: Dogs, Jet Skis (emphasis added).

Q: Okay. And since that time, have you, as the chief of the beach patrol, let the people do what they wanted to do when you were there with the then mayor?

A: If we got complaints from the public, the police department would respond, if people were out of control with—the alcohol, or the dogs.

Q: Okay.

A: And we finally got it under control.

Q: Okay. When did you finally get it under control?

A: Well, with the dogs, we eliminated that. But the alcohol, you never eliminate.

Q: Since July 27, 2012, I have been to Moore's Beach and the area that you call the Inlet Beach several times, and I have witnessed police officers of the City of North Wildwood walking on the beach. Have you made that same observation?

A: Yes.

Q: All right. Did you ever talk to the chief of the North Wildwood Police Department about having North Wildwood police officers patrol Moore's Beach and the Inlet Beach?

A: Yes.

Q: All right. And going back as many years as you feel comfortable telling me, how long have you been discussions with the chief of police of the City of North Wildwood about patrolling Moore's Beach and the Inlet Beach?

A: The last 10 years.

See Cavalier Dep. 31:5- 34:3.

41. One year to the day prior to Brad's drowning, on July 27, 2011, Shorenewstoday.com posted an article entitled "Guard Chief Warns About Swimming in Inlet." This article was posted a result of the drowning fatalities of a Baltimore woman off of the unprotected inlet beach. Chief Cavalier is quoted as saying:

The Inlet can look like it has calm water, but it is deceiving. **The water starts off shallow but then about two feet out from shore it can drop off (emphasis added).** You can go from knee deep to right over your head real quick. There's a certain point off the shore, you can see it from the sea wall, the water looks like a washing machine out there. See Exhibit "D".

42. Attached hereto and made a part hereof as Exhibit "D" is a true and accurate copy of the above referenced article.

43. Lieutenant David Lindsay, a retired 32 year veteran of the North Wildwood Beach Patrol, was deposed in connection with this matter's companion case on March 2, 2016. In that deposition, Lieutenant Lindsay testified as follows:

Q: In the North Wildwood Beach Patrol, could you draw with a red marker where the inlet zone was?

A: Sure.

Q: All right. Now, you know the city better than I do... can you give me street names?

A: Yes, Sir.

Q: Okay. Go ahead.

A: Inlet zone went from Surf Avenue down to the ocean, along the waterfront to the rock pile at Second and JFK, and then back along the bulkhead or walkway up to, I believe it's First and JFK.

Q: First?

A: First and Surf.

See Lindsay Dep. 13:9-23.

Q: For how many years before July 27, 2012, were you assigned for the summer to, we'll call it, the inlet zone?

A: I believe in '98, I was moved to the Inlet.

Q:...I'm surmising that because of your experience and your professionalism, you were assigned to the inlet zone, as opposed to other zones. Would that be a fair statement?

A: Well, I was assigned to the inlet zone in '90—the dates aren't exactly clear, but around '96, I was put in charge of the Jet Ski.

Q: Right.

A: And then the Jet Ski was more or less put in charge—it was assigned to the Inlet. So, I went with the Jet Ski.

...

Q:... am I correct in saying that the area where, is, say Moore's Beach and the Inlet Beach is some of the more dangerous beach area in North Wildwood, because of these currents that we've been talking about?

A: That's true.

See Lindsay Dep. 20:8-21:13.

44. Attached hereto and made a part hereof as Exhibit "E" is a true and accurate copy of the deposition transcript of Lieutenant Lindsay.

45. Since Lieutenant Lindsay was in charge of the Inlet section of the beach he was asked at depositions how he knew whether or not someone was in need of assistance on the Unprotected Inlet Beach. Lieutenant Lindsay testified in the following manner:

Q: According to these records, which we'll get in a moment, it appears to us that there were occasions where lifeguards, and not just saying you necessarily just yet,

...

Q: Where lifeguards that were posted in the inlet zone had to effectuate rescues up north, the Moore's Beach, and at the Point area. Is that correct?

A: Yes, sir.

Q: All right. And how would you, if you were posted in the inlet zone, know that somebody was in trouble at the beaches, which is Moore's Beach, the Point area? How would you know that?

A: Well, I actually was, you know, a lot of guys made jokes, because I would always listen to scan. But because of the section of the beach I was in charge of, I would have my radio on scan all the time, so I I'm listening directly to dispatch.

See Lindsay Dep. 26:4-22.

46. Lieutenant Lindsay described the Hereford Inlet Conditions as follows:

Q: Okay. If you had to give me an estimate of the number of times when you were assigned to the inlet zone before July 27, 2012, that you had to assist in rescues of people who were trying to swim from Moore's Beach to Champagne Island, or back, give me your best estimate. How many times a summer?

A: Twice a week.

Q: Okay. And I have a buddy who was raised down here in Cape May County. And he told—he's a tremendous swimmer, but he was explaining to me how difficult that swim is, because of the currents. Correct?

A: Yea. It's treacherous.

See Lindsay Dep. 29:8-20.

47. On July 1, 2013, Lieutenant Lindsay was recorded by a Mrs. Simpson on the North Wildwood Beach. This conversation was transcribed. See Exhibit "F". Lieutenant Lindsay was questioned about the conversation at his deposition.

48. Attached hereto and made a part hereof as Exhibit "F" is a true and accurate copy of the above referenced transcription.

49. Lieutenant Lindsay, who is of the opinion that the Unprotected Inlet Beach needs to be shut down to prevent future drownings, clarified at his deposition that he believes the reason the beach has not been shut down is because the local establishments and people would be against the beach closure. Lieutenant Lindsay described his reasoning as follows:

Q: ... What was the pressure that whomever that was associated with the bars was putting on to keep Moore's Beach open, as opposed to closing it?

A: Well, to be honest with you, I—I don't know any pressure. When I was in that conversation [the recorded conversation with Mrs. Simpson] I was really just talking about my own personal opinion. And what I did a lot with—and you, know, I still to that day feel the same way, it has nothing to do with how the city or the bartenders—the bar owners, but it's just my personal opinion would be that if you were to—if you were to shut that section of the beach down, which is really the—the only way you're going to prevent another drowning, and everything I say there, you know, I'll stand by. I would have told Mrs. Simpson---

Q: Right.

A:-- the same thing if she told me she was with you guys.

Q: Right.

A: So, it's not a matter of any of the bar owners, or anyone. It's just my personal opinion that if you were to shut down this section of the beach—

Q: Right.

A:--which, and you said you were there in the—you know, the peak of the summer, I don't know the bar owners that are right over the bulkhead would be too happy. And I know for a fact that the—the local people, who go to that beach, just to get away from the lifeguards, you—you know, you wouldn't have a happy bunch of people.

See Lindsay Dep. 32:11-33:18

50. Lieutenant Lindsay made a statement to Mrs. Simpson regarding the number of drowning fatalities on the Unprotect Inlet Beach. When questioned about this statement at deposition, Lieutenant Lindsay testified:

Q:... Now, let me ask you this: you told Mrs. Simpson on the bottom of page 3, "You know, there's seven drownings in nine years."

A: um-hum.

Q: When you say drownings, are they fatalities?

A: Well, to be honest with you, there were four in nine years. What I would do is, I would sit here in my truck, and I would see people down there.

Q: At the Point, you mean?

A: At the Point.

Q: Yeah.

A: And what I would do is, I would go down there, and try to express to the people, you know, how dangerous it is down there. So, when I said that, it was just trying to get people—

See Lindsay Dep. 34:20-35:9.

51. Lieutenant Lindsay was asked at his deposition why the Unprotected Inlet Beach remains unprotected despite the number of drowning fatalities and rescues on the Unprotected Inlet Beach. He responded in the following manner:

Q:... You've been very candid and truthful today, and I respect that. And I'm almost finished. I just want to ask you a question. I've been through all of these reports, okay, yours and others. **With all the rescues that are documented, I keep asking myself, why wasn't there a lifeguard stand with lifeguards close to Moore's Beach, as opposed to being at, First and Surf?**

A: **First and Surf, yeah. Well, the answer I would give to that question is, when you put a lifeguard stand on the beach, you're telling the public that's a safe place to swim. And that area of the beach is anything but safe (emphasis added).** Forget about the currents. It's a boating channel. I explained to my—Will the other day, we joked about, we thought we were going to see Rodney Dangerfield come in on Caddyshack with the horn going, Jet Skis, you know, kite surfers, speed boats. You name it. I mean, you've been down there.

Q: Yeah.

A: On a—on July 4th, it's—we would drive down there, and we'd be like, let's get out of here. It's—as a lifeguard, it was—we didn't want to be anywhere near it.

See Lindsay Dep. 43:20-44:18.

52. **Lieutenant Lindsay expressed extreme concern regarding the lack of warning to beachgoers such as Brad Smith. He truly believes that the only way to prevent another drowning at the Unprotected Inlet Beach is to close the beach completely.** Lieutenant Lindsay testified in the following manner:

Q: Well, what warnings are there to people like Brad Smith, who's walking with his daughter down the beach, to say that there could come a time where you're going to walk into 10 foot deep water when you're only walking in ankle deep to mid calf water? There's no warning?

A: No. The signs we put up, dangerous currents. But—

Q: But you wouldn't see them if you're walking from a protected beach to where the event took place?

A: No. Nope (emphasis added).

Q: All right. Here's another thing I asked myself. And it's easy for me to ask questions, and it's tough for people to provide answers. I realize that. What do you think, given all your experience on the beach patrol, and especially with this area that we've been talking about, how do we prevent another Brad Smith from drowning?

...

A: Yeah. You know, being a lieutenant down there for so long, and being on a lot of these drownings, you know, I asked myself the same thing. And I think the only way to prevent it is to shut the beach down completely (emphasis added). I mean, fences, you know, guard dogs, 24/7. Not even—not even walking down there. Because there's—you know—

Q: In a perfect world, if—if you were king, where would you shut the beach off,; from what point to what point?

...

Q: What you're saying is you'd have to close the beaches from Moore's Beach to the inlet zone, where it starts?

A: Yes.

Q: Okay.

A: And no one step a foot on—on the sand.

See Lindsay Dep. 45:10- 47:13.

Q:... What would you tell them when you went down there, when they're at the Point, as to why they shouldn't be swimming there?

A: We would tell them that they're in unprotected part of the beach, unguarded part, and that it's not a safe place to swim.

Q: Okay. If somebody was walking at water's edge, would you tell them not to walk there?

A: I couldn't we just didn't have the—because it was—it's pretty—you know being down there yourself, it's a

pretty popular area to walk. A lot of people—a lot of people that are the Moore's Beach will walk this way to get a hot dog, a lot of people that are at the inlet beach will walk that way to see the boats, and Jet Skis, and—so, it—you know, it just wasn't—it wasn't—

Q: Yeah. The Chief touched on that. Not enough manpower, or woman power.

A: Right.

Q: To be politically correct. The—when people would walk from Moore's Beach south, where would they go to get a hot dog?

A: There was a stand—there's a stand at First and Surf, and also one at Second and JFK.

Q: Okay. In a perfect world, if North Wildwood had an unlimited budget, would you, if you were the chief, have lifeguards walking on foot between Moore's Beach and the beginning of the inlet zone to warn people about that even walking in ankle deep water could be dangerous.

A: Not lifeguards. Police.

Q: Who would you—If you would have to have police department. Because you'd have too much of a confrontation with—with the beach patrol.

...

A: Yeah. I mean, you'd have to really, it would be like a military state. You'd have to—you would get a—have such a problem with locals. That's their beach. They—you know, they think, you know.

Q: Um-hum. You know, I'm going to leave this up to you if you want to answer it or not. Mrs. Smith, her sole motive by this litigation is never to let this happen to another family, to lose, you know, a husband, two young—you know, a father to, you know—to two young kids. You don't have to answer if you don't want to.

A: Um hum.

Q: And nobody's blaming you please, think about this whole thing.

A: Oh, I know.

Q: What would you say to her about the future for—to prevent this from happening again?

A: Yeah. You know, it definitely wasn't an easy thing for me. I would tell her I don't know what the answer is. And I sat—I sit on the beach eight hours a day, six days a week. And knowing how dangerous it is down there, trying to do my best. And you know, I know, our response team couldn't have done a better job. There was a Jet Ski on scene.

Q: Yeah.

A: That was right there.

Q: Right, yeah, we know.

...

A: What it is, is you put big fences, electrical fences with guard dogs, and police, and you don't let people in there.

That's—that's what it comes down to.

See Lindsay Dep. 51:8-54:8

53. An extensive amount of depositions were taken in the Law Division companion case, and almost every city official was asked about their personal knowledge of the dangers which are present on the Unprotected Inlet Beach.

54. Former City Administrator Louis Belasco responded in the following manner:

Q: ... Being a resident of North Wildwood, and you're maturing through grammar school and high school and college, were there any dangers to the inlet beach area, and including the inlet that runs adjacent to it, that you became aware of, as someone living there?

...

A: Well, all inlets are inherently dangerous, mostly due to the currents that run through them.

See Belasco Dep. 15:5-15.

55. Attached hereto and made a part hereof as Exhibit "G" is a true and accurate copy of the deposition transcript of Louis Belasco.

56. Carl Delinski, Jr., the Supervisor of Public works in North Wildwood testified in the following manner:

Q: Okay. Now, given your employment with the city over the years, have there been times that the Inlet Beach and Moore's Inlet Beach changes in size?

A: Constantly.

Q: Okay. And why is that?

A: I would guess because of the inlet, itself.

Q: Yeah.

A: The tides that run through the inlet. It's constantly changing. The whole beach, actually, not just there. Even our beach front, the big beach. But that's—from day to day, it could be different when you go down there.

Q: All right. We've taken a lot of depositions, we also took the deposition of Chief Cavalier of the beach patrol, so all of us lawyers know—we've learned a lot about the inlet, Hereford Inlet, and the beaches there. Just given your experience with that inlet, itself, is there something unique about the inlet waters there?

A: The tides are terrible there. I mean it—that's where the water fills the back bay, and empties. So, it rips through there like really bad. I mean (emphasis added).

See Delinksi Dep. 15:3- 16:3.

Q: All right. We took the deposition of Chief Cavalier, who was talking about when the back bays are going into the ocean, that you can literally see—

A: Oh, yeah,

Q: --a vortex?

A: Yes,

Q: All right? He described it for us in pretty good detail. Have you ever seen this vortex?

A: Sure.

Q: Okay. And does it typically occur when the back bays are going into the ocean?

A: I would think, yeah, on the outgoing tides.

Q: Yeah. Outgoing from the bay to the ocean?

A: From the bay into the ocean, yeah.

Q: And is it there every day when the back bays are going into the ocean?

A: I would think in spots, yes.

Q: And what does it look like?

A: Whirlpool. Just a big vortex, like you said. You could actually see the water spinning (emphasis added).

See Delinksi Dep. 16:18 – 17:15.

57. Attached hereto and made a part hereof as Exhibit "H" is a true and accurate copy of the deposition transcript of Carl Delinski, Jr.

58. Chief of the North Wildwood Police Department, Matthew Gallagher, testified in the following manner:

Q: Okay., are you aware of any dangers of what—of the beach that you circled in blue, which was Moore's Beach, on Exhibit 58, of the beach collapsing?

A: I was called down to Moore's beach, I don't know remember the year, where they actually did close off the beach for a little while, because there was—sand was collapsing into the ocean.

Q: Okay. And what year or years was that?

A: I don't recall.

Q: Best estimate?

A: within the last five years.

See Gallagher Dep. 22:21- 23:8.

59. Attached hereto and made a part hereof as Exhibit "I" is a true and accurate copy of the deposition transcript of Matthew Gallagher.

60. Mayor of North Wildwood, Patrick Rosenello was deposed in connection with the companion case on March 10, 2016. He testified as follows:

Q: .. And my question is, before July 2012, did you ever see people wading in the water off of Moore's Beach?

A: Yes.

Q: Okay. Now, were those individuals that you saw in violation of any city ordinances?

A: I don't know.

Q: Okay. When you saw those people wading off the Moore's Beach, before July 2012, did you call the North Wildwood Police Department, or the North Wildwood Beach Patrol?

A: No.

Q: Okay. When you saw those people wading in the water off of Moore's Beach before July 2012, did you think that they were exposing themselves to any hazardous conditions existing in the water that constitutes Hereford Inlet?

A: I believe that if you're not swimming in front of a lifeguard, you are subjecting yourself to a hazardous condition in the ocean.

See Rosenello Dep. 42:14-43:11.

Q:.. have you ever seen any signs on the area that you delineated as the inlet beach, warning anyone about the dangers of walking on—in ankle deep water?

A: No specifically referencing ankle deep water, no.

See Rosenello Dep. 50:23- 51:3.

Q: Okay. Okay. The second sentence I've highlighted says, "There's no gray area. If there's not a lifeguard on duty, you should not be in the ocean," he said. 'It's such a dynamic environment, to say you were only so deep, that's not the issue. There's no room for equivocation.'" Do you stand by that?

A: Yes.

Q: All right. As it relates to the activity of Mr. Smith and his daughter, and Scott Sunderland and his daughter, in walking in ankle deep water, would you say—would you agree with me that this quote that I just referenced does not apply to that activity?

A: I would say that the ocean is a wilderness, and if I were not familiar with the area I'm in, and there was no lifeguards there, I would not advise someone to be—to go into that water.

Q: Even in ankle deep water?

A: Even in ankle deep water.

See Rosenello Dep. 82:6-25.

Q: All right. The next quote, "If you choose to enter the water on an unguarded beach, you do so at great risk to yourself; he said, 'no swimming, swimming, if there's no lifeguards, you should not be wet. It's very simple. So, is it your position, again, in light of their particular statement, that Mr. Smith and his daughter were exposing themselves to hazardous conditions by walking in ankle deep water at a beach that there was no lifeguard?"

A: Again, I think it's incredibly unfortunate what happened to Mr. Smith. I think that people have the mistaken impression that the ocean is similar to their neighborhood pool, and they're not familiar with the currents and tides and things of that nature. And I think, in this context, now, at this time, I'm the mayor of North Wildwood, I'm the Director of Public Safety, I think it's very important for me to very, very clearly take the public position that if there is not a lifeguard, you should not be wet. And I stand by that answer.

See Rosenello Dep. 83:24-84:21.

A: It is my position they were exposing themselves to hazardous conditions? I think—I think the best answer I can give you is that, being interviewed for this newspaper article, as the spokesperson for the City of North Wildwood, an article that's coming out in the middle of the summer, I believe it was my obligation to

make a statement that, do not go in the water at an unguarded beach. That's what—that's the message O was trying to send with that quote. So that—there—and again, I stand by that, that I don't think that there is room for, well, I was ankle deep, I was knee deep, I was thigh deep. You should not enter the ocean unless there is a lifeguard on duty on that beach.

See Rosenello Dep. 85:3-17.

61. Attached hereto and made a part hereof as Exhibit "J" is a true and accurate copy of the deposition transcript of Patrick Rosenello.

62. Mayor Rosenello also described the Hereford Inlet as constantly changing:

Q: All right. This is kind of a follow-up question to something I asked you about 15 minutes ago: Looking at that body of water called the inlet, and given the fact that you started living in North Wildwood at age four. Right? Up until July 27, 2012, the drowning of Mr. Smith, what have you, personally, observed about the inlet, itself, the body of water, relative to the- I'll be a little bit more specific—relative to how the actual channel moves?

A: Right. It changes on an almost daily basis. There are what I call shoals or sand bars that come and go. This large piece of sand you see up here and coming off the bottom of Stone Harbor didn't exist five years ago, and it might not exist tomorrow. The inlet beach that we're talking of didn't exist until probably the late '80s, maybe, mid to late '80s. There was no sand accumulated there. So, it—it—the whole—the whole area changes on a—I say on a daily basis. I still live in an area where I can see the inlet. And literally on a daily basis.

See Rosenello Dep. 29:12-30:7.

63. Mayor Rosenello when asked why he believes that the Unprotected Inlet Beach should remain unprotected, he testified:

A: That area is a large expanse, and it would probably require upwards of 10 additional lifeguard stands, which during the summer would be at least 20 additional lifeguards, plus supervision, which would be a very large increase to the size of our beach patrol. So, it would be from—from a resource standpoint, and a recruitment standpoint of getting qualified guards, that

would be a very large increase in our—in our—in our enforce—in our beach patrol.

Q: Okay. Before July 27, 2012, is it your position, based upon your experience as a governmental official, that North Wildwood simply didn't have the money to put those additional lifeguards posted in the area that you have defined as the inlet beach, which includes Moore's Beach?

A: No. I think the city, if we chose to allocate resources there, we could have—we could certainly afford to put lifeguard stands there (emphasis added). But another—another reason, and I only think of it, because I looked at this, we also want to provide people areas where they can fish, and engage in other things to do not involve lifeguarding. And you can't have guarded—you can't allow people to fish at guarded areas. That's a very popular fishing area, as well. And so, that would be another reason why I would not support that. Because again, we try to accommodate swimmers, surfers, fishermen, a lot of different activities that happen on the beach.

Q: Well—

A: Or the ocean.

See Rosenello Dep. 74:5- 75:12.

64. Mayor Rosenello is of the opinion that the Unprotected Inlet Beach should not be closed to the public. He described his reasoning in the following manner:

A: Exhibit 72 is probably the best depiction. I mean, people fish, they sit, they relax on the beach, they play games on the beach. You know, and I—I think keeping the beaches open to the public is important for---

Q: Okay. If that's being the—if that's the case, just in light of what you testified, why wasn't there a lifeguard on Moore's Beach before July 27, 2012.

A: There's still not a—I'm sorry.

A: We have a—North Wildwood's an island, literally, and we have many areas of tidal areas that aren't guarded by lifeguards. As a matter of fact, if you further west, there's areas where small beaches develop along the sea wall frequently. And we don't guard them all. We have a certain number of designated guarded lifeguard beaches that we guard, and we—it would simply be impossible to place a lifeguard at every place where the public has access to the ocean or bay.

See Rosenello Dep. 69:7-70:4.

65. Surf fishing is permitted on the Unprotected Inlet Beach. In his March 10, 2016, deposition, Mayor of North Wildwood, Mayor Rosenello clarified the North Wildwood Surf Fishing rules as follows:

Q: So, people are permitted to fish in that area?

A: Yes

Q: All right.

A: They're—I'm sorry. People are pretty much permitted to fish anywhere in the city where it's an unguarded beach, including—we have a couple spots down around Second and Kennedy, where we don't guard because of a groin there, and again, people are allowed to fish in that area.

See Rosenello Dep. 75:18-76:2

66. Surf fishing is also promoted by the City of North Wildwood. Stephen DeHorsey, Jr., Assistant Superintendent of Recreation and Director of Tourism for the City of North Wildwood testified that every year there the city holds a surf fishing contest, and one of the permitted beaches for this tournament is the Unprotected Inlet Beach, Mr. DeHorsey testified as follows:

Q: Okay. Could you give me kind of an overview of what the city's involvement was with the surf fishing before July of 2012?

A: The recreation department runs a surf fishing tournament, and then there's actually two surf fishing tournaments that are held in North Wildwood through two other organizations.

Q: Okay. So, let's do the surf fishing tournament that is conducted by the city.

A: The recreation department runs a surf fishing tournament, and then there's actually two surf fishing tournaments that are held in North Wildwood through two other organizations.

Q: Okay. So, let's do the surf fishing tournament that is conducted by the city,

A: By the rec. Okay?

Q: By the recreation?

A: Department, yes.

Q:Of the City of North Wildwood?

A: Yes.

Q:All right. And at what beaches does this surf fishing tournament take place?

A: Our boundaries are 26th Street and the beach, all the way down to—

Q: Moore's Inlet Beach?

A: Past that. There's apartments on the seawall. And there's a fence that goes up, all the way—you can fish all the way up until there.

Q: Okay. And when is the surf fishing tournament typically conducted?

A: The weekend after Labor Day.

Q: Okay. And exactly what does the city do to get this tournament going?

A: We put it in our information, our calendar of events, put posters up, and one or two signs.

See. DeHorsey Dep. 20: 3 – 21:10.

67. Attached hereto and made a part hereof as Exhibit "K" is a true and accurate copy of the deposition transcript of Stephen DeHorsey, Jr.

68. There are a number of publications which discuss the powerful and dangerous conditions of the Hereford Inlet.

69. The former Mayor of North Wildwood, William Henfey, is quoted in the September 26, 2012, issue of the Cape May County Herald as saying: "there's a vortex that's created in our inlet, we have competing inlets coming out of Hereford Inlet and it's causing a whirlpool effect there." See Exhibit "L".

70. Attached hereto and made a part hereof as Exhibit "L" is a true and accurate copy of the above referenced article.

71. There Hereford Inlet Lighthouse information packet states: "...strong currents and shifting sandbars near the entrance to the inlet caused frequent groundings and shipwrecks. Because of this, in 1849, a Life Saving Station was constructed along the sought bank of the Hereford Inlet." See Exhibit "M".

72. Attached hereto and made a part hereof as Exhibit “M” is a true and accurate representation of the above referenced pamphlet.

73. In a December 17, 2013, report the U.S. Army Corps of Engineers stated that, “Tidal currents may cause tangible effects on shore stability and water quality. These are tidal driven water level differences between the ocean and back bay areas. The periodic rise and fall of the ocean water elevation adjacent to barrier islands, creates the ebb and flood cycle of tidal currents. See Exhibit “N” p. 59.

74. Attached hereto and made a part hereof as Exhibit “N” is a true and accurate copy of the above referenced report.

75. Traditionally, the last protected beach in North Wildwood is Surf Avenue. First and Surf Avenue faces the Hereford Inlet. See Rosenello Dep. 49:18-19.

76. Michael C. Maslowski a retired New Jersey State Trooper, and member of the Marine Division of the New Jersey State Police provided a certification dated September 28, 2016.

77. Attached hereto and made a part hereof as Exhibit “O” is the certification of Michael C. Maslowski.

78. In his certification Trooper Maslowski indicates that the Marine Division of the New Jersey State Police has been called in to assist with water rescues of the Unprotected Inlet Beach over the years. See Maslowski Cert. ¶ 7.

79. In addition, the Marine Division of the New Jersey State Police regularly patrols the Hereford Inlet, and the State Troopers are aware of unreported water rescues which are effectuated by civilians. See Maslowski Cert. ¶ 11-13.

80. The State Troopers are aware of the drop off which is present on the Unprotected Inlet Beach and the vortex or whirlpool. See Maslowski Cert. ¶ 15.

81. The lifeguards provide surf wheel chairs for disabled beach goers at this entrance so that handicapped beach goers can access the Hereford Inlet Beach. See Exhibit “P” p. 8.

82. Attached hereto and made a part hereof as Exhibit “P” is a true and accurate copy of the North Wildwood New Jersey 2016 Information & Recreation Guide.

83. Unfortunately, the Smith drowning was not the only drowning which occurred as a result of the drop off on the Unprotected Inlet Beach.

84. On June 30, 2009, after the lifeguards had left for the day and signaled everyone out of the water, three women began to enter the water. See Exhibit “Q”.

85. Attached hereto and made a part hereof as Exhibit “Q” is a true and accurate copy of the North Wildwood Police Department Investigation Report from July 13, 2009, regarding the Hart and Watkins drownings.

86. On August 31, 2016, the survivor of that incident, Domonique McNeil was deposed in connection with this matter’s companion case.

87. Attached hereto and made a part hereof as Exhibit “R” is a true and accurate copy of the deposition transcript of Domonique McNeil.

88. While the women were standing at the water’s edge, the first woman, Domonique McNeil, moved about two feet to the left and fell as a result of the drop off. Ms. McNeil described this feeling as “a false bottom.” See McNeil Dep. 43:7-10

89. Shortly after Ms. McNeil fell into the water, her two relatives, Jamilah Watkins and Shayne Hart were also pulled in while trying to help Ms. McNeil out of the water. See McNeil Dep. 23:3-19

90. Eventually, the three were separated, and Ms. McNeil described the water as feeling, “like a twister, an underwater twister, but at the same time it was like pushing and pulling.” See McNeil Dep. 46:11-15.

91. McNeil went on to explain, “... if I tried to move, I wasn’t going anywhere. Like I was kind of trapped where I was at, and then it was more just waves. Like I don’t know, the water went from zero feet to like bottomless.” See McNeil Dep. 47:3-7.

92. She reached a man on the beach and he called 911. However, the two had lost sight of Ms. Watkins and Ms. Hart. See Exhibit “Q”.

93. The two young women were recovered from the water by emergency personal and transported to the hospital, where they were eventually pronounced dead. See Exhibit “Q”.

94. Additionally, as discussed in Exhibit “D” another woman drowned in July of 2011. Her belongings were found on the Unprotected Inlet Beach.

95. Nevertheless, the City of North Wildwood promotes itself as a safe destination for families. In an article entitled, “Things to do in North Wildwood, NJ,” posted on the USA Today website, it is noted that “Moore’s Inlet is the only beach in the Wildwoods that allows dogs and barbecues. It’s a good spot for fishing and renting personal watercraft.” See Exhibit “S”.

96. Attached hereto and made a part hereof as Exhibit “S” is a true and accurate copy of the above referenced article.

97. J. Richard Weggel, Ph.D, P.E., D.CE., has opined that due to the hazards at the Unprotected Inlet Beach, discussed in his report dated April 19, 2016, compel him to strongly recommend the Unprotected Inlet Beach at Hereford Inlet, North Wildwood, NJ, be closed.

98. Attached hereto and made a part hereof as Exhibit "T" is a true and accurate copy of two Certifications executed by Professor Weggel which include Report, Addendum Report, and Curriculum Vitae, and photographs which Professor Weggel will utilize if asked to testify at a hearing.

99. Professor Weggel stated, "the fact that steep slopes appear on all six surveys [which he reviewed] indicates that the conditions are persistent. See Weggel Addendum.

100. The dangerous slope conditions are below the water line and are not visible to pedestrians walking on the beach, furthermore, they are not generally predictable although they probably occur most frequently during ebb current flows in the inlet." See Weggel Addendum.

101. Dr. Weggel further advised, "I personally would not walk near the water line on the beach and I would advise my friends and loved-ones to stay away from this area." See Weggel Addendum.

102. Dr. Weggel also explained, "I am bound by the Code of Ethics of the American Society of Civil Engineers to hold paramount the safety, health, and welfare of the public. I believe that the city inlet conditions are a threat to public safety." See Weggel Addendum.

103. There are photographs which show the popularity of said beach, which Dr. Weggel opines is a threat to public safety. See Exhibits "U"- "Z".

104. Attached hereto and made a part hereof as Exhibits "U", "V", "W", "X", "Y", and "Z" are the above referenced photographs.

COUNT ONE

1. Plaintiffs repeat the allegations of the previous paragraphs as if same were set forth at length herein.

2. The Defendant City of North Wildwood by and through its agents, agencies, and

employees, is responsible for the maintenance, supervision, management, and control of the Unprotected Inlet Beach.

3. Defendant City of North Wildwood owes the public in general and the Plaintiffs as a member thereof, the duty to maintain, supervise, manage, and control their property so as not to injure the public's right to maintain public health, public safety, and public peace.

4. Defendant City of North Wildwood owes the public the duty to maintain, supervise, manage, and control their property so as not to jeopardize or injure the public's comfort, or the public convenience.

5. Defendant City of North Wildwood intentionally and recklessly markets and promotes the beach as a safe destination for beach goers to media, on their website, and in the North Wildwood New Jersey Information and Recreation Guide. Specifically, this information refers to the Hereford Inlet Beach from Surf Avenue north until the end of the beach (hereinafter "Unprotected Inlet Beach"). As such Defendant North Wildwood intends for beachgoers to frequent the beach in this location. However Defendant fails to guard the Unprotected Inlet Beach or adequately warn of the dangers associated with the Unprotected Inlet Beach.

6. For over ten years Defendant City of North Wildwood was aware of the life threatening hazard presented by the dangerous conditions created by a drop off that was often two feet from the shoreline at the Unprotected Inlet Beach, coupled with strong currents in the Hereford Inlet and a vortex and/or whirlpool in the Hereford Inlet.

7. Defendant the City of North Wildwood's conduct in maintaining, supervising, managing and controlling the Unprotected Inlet Beach causes beachgoers to swim, stand, and walk in ankle deep water.

8. When beachgoers take part in these activities they are exposed to the risk that they may be suddenly dropped in the ocean over their heads, and be pulled by the current and/or

vortex and/or the whirlpool out to sea and injured or killed by conditions that are present in the Hereford Inlet.

9. Moreover, there is no way for a casual beach user or tourist to know or appreciate that there is a real and certain substantial potential of injury and/or death to beach goers.

10. On July 27, 2012, Plaintiff, Brad Smith was unaware of the dangerous conditions created by the drop off and the currents and/or vortex and/or whirlpool when he was walking in ankle deep water with his seven year old daughter.

11. Defendant City of North Wildwood's conduct constitutes a nuisance as hundreds of beachgoers walk along the water's edge on this particular Unguarded Inlet Beach every day in the summer months. These people are unknowingly in constant danger of taking a wrong step and being swept into a vortex that can suck them under the water and drown them.

12. Defendant the City of North Wildwood knows that its actions and inactions interfere with the citizens and beachgoers of North Wildwood's public health, safety, and welfare and the public's right to be free from unnecessary danger.

13. Defendant City of North Wildwood's conduct is a direct and proximate cause of Brad Smith's death, as well as an unreasonable interference with the safety, health, and welfare of the citizens and beachgoers of North Wildwood's right to be free from danger.

14. Defendant City of North Wildwood's conduct, if not stopped, will continue to pose an interference to the health, safety, and welfare of the citizens and beachgoers of North Wildwood.

COUNT TWO

1. Plaintiffs repeat the allegations of the previous paragraphs as if same were set forth at length herein.

2. The Defendant State of New Jersey owns the Unprotected Inlet Beach area

where Brad Smith, Brandy Smith, Scott Sunderland, and his two young children were walking.

3. The Defendant City of North Wildwood by and through its agents, agencies, and employees, is responsible for the maintenance, supervision, management, and control of the Unprotected Inlet Beach.

4. Defendant State of New Jersey owes the public in general and the Plaintiffs as a member thereof, the duty to maintain, supervise, manage, and control their property so as not to injure the public's right to maintain public health, public safety, and public peace.

5. Defendant State of New Jersey owes the public the duty to maintain, supervise, manage, and control their property so as not to jeopardize or injure the public's comfort, or the public convenience.

6. Defendant State of New Jersey was aware of dangerous conditions created by a drop off that was present on the Unprotected Inlet Beach, as well as strong currents in the Hereford Inlet and a vortex and/or whirlpool in the Hereford Inlet.

7. Defendant the State of New Jersey's conduct in maintaining, supervising, managing and controlling the Unprotected Inlet Beach causes beachgoers to swim, stand, and walk in ankle deep water.

8. When beachgoers are exposed to a risk that they will be pulled into the current and/or the vortex and/or the whirlpool and conditions that are present in the Hereford Inlet.

9. There is a real and certain substantial potential of injury and/or death to beach goers.

10. On July 27, 2012, Plaintiff, Brad Smith was unaware of the dangerous conditions created by the drop off and the currents and/or vortex and/or whirlpool when he was walking in ankle deep water with his seven year old daughter.

11. Defendant State of New Jersey's conduct constitutes a nuisance as hundreds of

beachgoers walk along the water's edge on this particular Unguarded Inlet Beach every day in the summer months. These people are unknowingly in constant danger of taking a wrong step and being swept into a vortex that can suck them under the water and drown them.

12. Defendant State of New Jersey knows that its actions and inactions interfere with the citizens and beachgoers of North Wildwood's public health, safety, and welfare and the public's right to be free from unnecessary danger.

13. Defendant State of New Jersey's conduct is a direct and proximate cause of Brad Smith's death, as well as an unreasonable interference with the safety, health, and welfare of the citizens and beachgoers of North Wildwood's right to be free from danger.

14. Defendant State of New Jersey's conduct, if not stopped, will continue to pose an interference to the health, safety, and welfare of the citizens and beachgoers of North Wildwood.

PRAYER FOR RELIEF

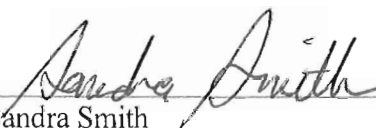
WHEREFORE, Plaintiff respectfully seeks judgment in its favor against Defendant as follows:

- (a) Defendants be immediately and permanently enjoined from allowing access to the Unprotected Inlet Beaches, reaching north of First Avenue and Surf Avenue until the Spruce Avenue and the Beach at the Sea Wall.

VERIFICATIONS OF SANDRA SMITH

I, Sandra Smith, of full age, hereby certify as follows:

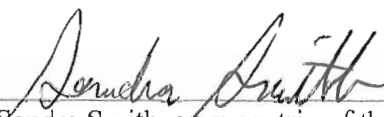
1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on my behalf.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.


Sandra Smith

DATED: 10/4/14

I, Sandra Smith, as Executrix of the Estate of George Bradley Smith, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on behalf of the Estate of George Bradley Smith.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.


Sandra Smith, as executrix of the Estate
of George Bradley Smith

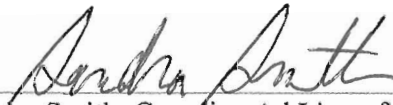
DATED: 10/4/14

I, Sandra Smith, as Guardian Ad Litem for my children, Kole and Brandy Smith, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on behalf of my children Kole and Brandy Smith.

2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.

3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Sandra Smith, Guardian Ad Litem for
my Children Kole and Brandy Smith

DATED: 10/4/16

VERIFICATIONS OF NICOLE GAETA AND KYLE SMITH

I, Nicole Gaeta, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on my behalf.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

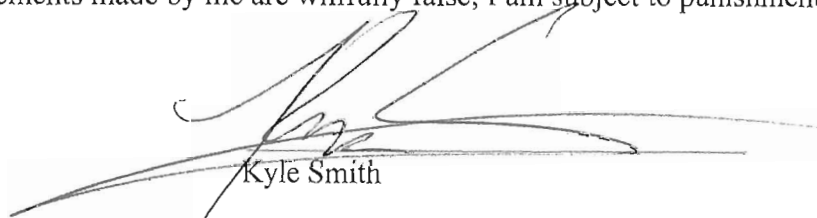


Nicole Gaeta

DATED: 10/4/16

I, Kyle Smith, hereby certify as follows:

1. I am the plaintiff in this matter. In that capacity, I am fully familiar with the facts set forth in this Complaint and I am authorized to make this Verification on my behalf.
2. I have read this Verified Complaint and based on my personal knowledge I know its contents are true.
3. I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

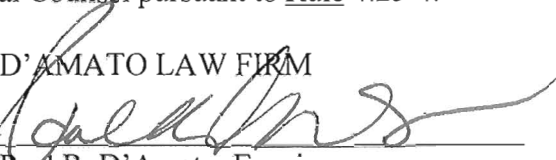
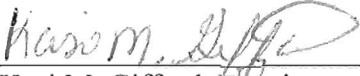


Kyle Smith

DATED: 10/4/16

NOTICE OF TRIAL COUNSEL

Paul R. D'Amato, Esquire is designated as Trial Counsel pursuant to Rule 4:25-4.

D'AMATO LAW FIRM
BY: 
Paul R. D'Amato, Esquire

Kasi M. Gifford, Esquire

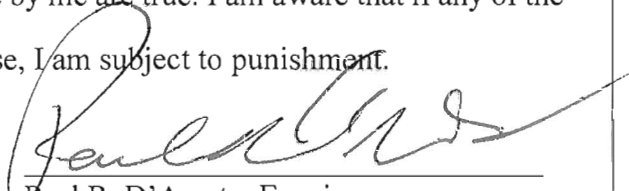
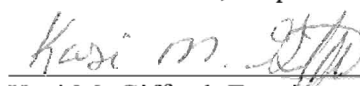
DATED 10/4/16

CERTIFICATION

Paul R. D'Amato, Esquire, of full age, certifies:

1. I am a member of the D'AMATO LAW FIRM and am entrusted with the preparation and trial of this case.
2. This case is the subject of a civil action captioned Smith v. City of North Wildwood, et als. Docket Number CPM-L-331-14 and CPM-L-324-16.


I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.


Paul R. D'Amato, Esquire

Kasi M. Gifford, Esquire

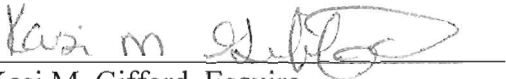
DATED 10/4/16

CERTIFICATION OF COMPLIANCE WITH RULE 1:38-7(c)

I, Paul R. D'Amato, Esquire, certify that confidential personal identifiers have been redacted from documents now submitted to the court, and will be redacted from all documents submitted in the future in accordance with Rule 1:38-7(b).



Paul R. D'Amato, Esquire

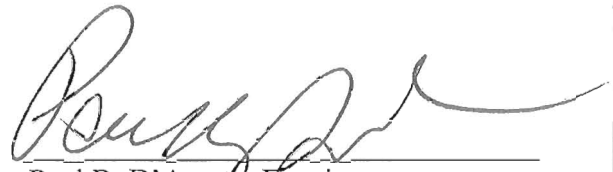


Kasi M. Gifford, Esquire

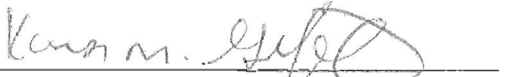
DATED: 10/4/14

GUARDIAN AD LITEM CERTIFICATION

I hereby certify that Plaintiff Sandra Smith as parent and guardian ad litem for her minor children Brandy and Kole Smith that does not have any interest contrary to that of the minors, and has consented to act as the Guardian Ad Litem.



Paul R. D'Amato, Esquire

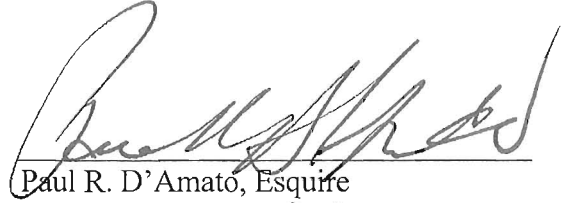


Kasi M. Gifford, Esquire

DATED: 10/4/16

NOTICE OF OTHER ACTIONS

Pursuant to Rule 4:5-1, the plaintiffs' attorneys hereby certify that there are two other cases pending in which the matter in controversy is the subject. These cases are docketed under CPM-L-331-14 and CPM-L-324-16.



Paul R. D'Amato, Esquire



Kasi M. Gifford, Esquire

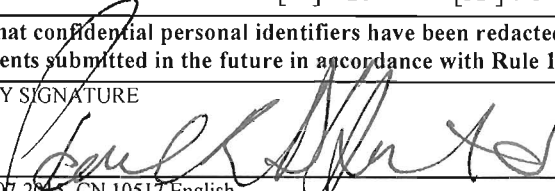
DATED: 10/4/16

D
D'AMATO
LAW FIRM

COUNSELORS AT LAW
A PROFESSIONAL CORPORATION

2900 Fire Road
Suite 200
Egg Harbor Township, NJ 08234

tab 2

CIVIL CASE INFORMATION STATEMENT (CIS) Use for initial Law Division – Civil Part pleadings (not motions) under Rule 4:5-1. Pleadings will be rejected for filing, under Rule 1:5-6(c), if information above the black bar is not completed or if attorney's signature is not affixed.		FOR USE BY CLERK'S OFFICE ONLY	
		PAYMENT TYPE: CK CG CA	
		CHG / CK NO.	
		AMOUNT:	
		OVERPAYMENT:	
BATCH NUMBER:			
ATTORNEY / PRO SE NAME Paul R. D'Amato	TELEPHONE NUMBER (609) 926-3300	COUNTY OF VENUE CAPE MAY	
FIRM NAME (If applicable) D'Amato Law Firm, P.C.		DOCKET NUMBER (When available)	
OFFICE ADDRESS 2900 Fire Road, Suite 200 Egg Harbor Township, New Jersey 08234		DOCUMENT TYPE VERIFIED COMPLAINT	
		JURY DEMAND [] YES [X] NO	
NAME OF PARTY (e.g. John Doe, Plaintiff) Sandra Smith, individually and as Executrix Estate of George Bradley Smith and as GAL for Children Kole Smith and Brandy Smith, and Nicole Gaeta, Kyle Smith, Plaintiffs		CAPTION Sandra Smith, indiv. and as Executrix Estate of George Bradley Smith and as GAL for Children Kole Smith and Brandy Smith, and Nicole Gaeta, Kyle Smith vs. City of No. Wildwood, State of NJ	
CASE TYPE NUMBER (See reverse side for listing) 801	HURRICANE SANDY RELATED? [] YES [X] NO	IS THIS A PROFESSIONAL MALPRACTICE CASE [] YES [X] NO IF YOU HAVE CHECKED "YES," SEE N.J.S.A. 2A:53A-27 AND APPLICABLE CASE LAW REGARDING YOUR OBLIGATION TO FILE AN AFFIDAVIT OF MERIT.	
RELATED CASES PENDING [X] YES [] NO	IF YES, LIST DOCKET NUMBERS: CPM-L-331-14 and CPM-L-324-16		
DO YOU ANTICIPATE ADDING ANY PARTIES (arising out of same transaction or occurrence) [] YES [X] NO	NAME OF DEFENDANT'S PRIMARY INSURANCE COMPANY, IF KNOWN [] NONE [] UNKNOWN		
THE INFORMATION PROVIDED ON THIS FORM CANNOT BE INTRODUCED INTO EVIDENCE.			
CASE CHARACTERISTICS FOR PURPOSES OF DETERMINING IF CASE IS APPROPRIATE FOR MEDIATION			
DO PARTIES HAVE A CURRENT, PAST OR RECURRENT RELATIONSHIP? [] YES [X] NO	IF YES, IS THIS RELATIONSHIP [] EMPLOYER - EMPLOYEE [] FRIEND / NEIGHBOR [] FAMILIAL [] BUSINESS [] OTHER (explain):		
DOES THE STATUTE GOVERNING THIS CASE PROVIDE FOR PAYMENT OF FEES BY THE LOSING PARTY? [] YES [X] NO			
USE THIS SPACE TO ALERT THE COURT TO ANY SPECIAL CASE CHARACTERISTICS THAT MAY WARRANT INDIVIDUAL MANAGEMENT OR ACCELERATED DISPOSITION: Pending Law Division action under Docket Number CPM-L-331-14 and CPM-L-324-16			
DO YOU OR YOUR CLIENT NEED ANY DISABILITY ACCOMMODATIONS? [] YES [X] NO IF YES, PLEASE IDENTIFY THE REQUESTED ACCOMMODATION:			
WILL AN INTERPRETER BE NEEDED? [] YES [X] NO IF YES, FOR WHAT LANGUAGE:			
I certify that confidential personal identifiers have been redacted from documents now submitted to the court, and will be redacted from all documents submitted in the future in accordance with Rule 1:38-7(b).			
ATTORNEY SIGNATURE 			

CIVIL CASE INFORMATION STATEMENT

(CIS)

Use for initial pleadings (not motions) under *Rule 4:5-1*

CASE TYPES (Choose one and enter number of case type in appropriate space on the reverse side.)

Track I - 150 days' discovery

- 151 NAME CHANGE
- 175 FORFEITURE
- 302 TENANCY
- 99 REAL PROPERTY (other than Tenancy, Contract, Condemnation, Complex Commercial or Construction)
- 502 BOOK ACCOUNT (debt collection matters only) 505 OTHER INSURANCE CLAIM (including declaratory judgment actions)
- 506 PIP COVERAGE
- 510 UM or UIM CLAIM (coverage issues only)
- 511 ACTION ON NEGOTIABLE INSTRUMENT
- 512 LEMON LAW
- 801 SUMMARY ACTION
- 802 OPEN PUBLIC RECORDS ACT (summary action)
- 999 OTHER (briefly describe nature of action)

Track II - 300 days' discovery

- 305 CONSTRUCTION
- 509 EMPLOYMENT (other than CEPA or LAD)
- 599 CONTRACT/COMMERCIAL TRANSACTION
- 603N AUTO NEGLIGENCE -- PERSONAL INJURY (non-verbal threshold)
- 603Y AUTO NEGLIGENCE -- PERSONAL INJURY (verbal threshold)
- 605 PERSONAL INJURY
- 610 AUTO NEGLIGENCE -- PROPERTY DAMAGE
- 621 UM or UIM CLAIM (includes bodily injury)
- 699 TORT -- OTHER

Track III - 450 days' discovery

- 005 CIVIL RIGHTS
- 301 CONDEMNATION
- 602 ASSAULT AND BATTERY
- 604 MEDICAL MALPRACTICE
- 606 PRODUCT LIABILITY
- 607 PROFESSIONAL MALPRACTICE
- 608 TOXIC TORT
- 609 DEFAMATION
- 616 WHISTLEBLOWER /CONSCIENTIOUS EMPLOYEE PROTECTION ACT (CEPA) CASES
- 617 INVERSE CONDEMNATION
- 618 LAW AGAINST DISCRIMINATION (LAD) CASES

Track IV - Active Case Management by Individual Judge / 450 days' discovery

- 156 ENVIRONMENTAL/ENVIRONMENTAL COVERAGE LITIGATION
- 303 MT. LAUREL
- 508 COMPLEX COMMERCIAL
- 513 COMPLEX CONSTRUCTION
- 514 INSURANCE FRAUD
- 620 FALSE CLAIMS ACT
- 701 ACTIONS IN LIEU OF PREROGATIVE WRITS

Multicounty Litigation (Track IV)

- | | |
|--|--|
| 271 ACCUTANE/ISOTRETINOIN | 290 POMPTON LAKES ENVIRONMENTAL LITIGATION |
| 274 RISPERDAL/SEROQUEL/ZYPREXA | 291 PELVIC MESH/GYNECARE |
| 278 ZOMETA/ARDIA | 292 PELVIC MESH/BARD |
| 279 GADOLINIUM | 293 DEPUY ASR HIP IMPLANT LITIGATION |
| 281 BRISTOL-MYERS SQUIBB ENVIRONMENTAL | 295 ALLODERM REGENERATIVE TISSUE MATRIX |
| 282 FOSAMAX | 296 STRYKER REJUVENATE/ABG II MDULAR HIP STEM COMPONENTS |
| 285 STRYKER TRIDENT HIP IMPLANTS | 297 MIRENA CONTRACEPTIVE DEVICE |
| 286 LEVAQUIN | 299 OLMESARTAN MEDOXOMIL MEDICATIONS/BENICAR |
| 287 YAZ/YASMIN/OCELLA | 300 TALC-BASED BODY POWDERS |
| 288 PRUDENTIALTORT LITIGATION | 601 ASBESTOS |
| 289 RGLAN | 628 PROPECIA |

If you believe this case requires a track other than that provided above, please indicate the reason on Side 1, in the space under "Case Characteristics."

Please check off each applicable category:

Putative Class Action

Title 59

tab 3

D'AMATO LAW FIRM, P.C.

By: Paul R. D'Amato, Esquire - NJ ID# 006901974

Kasi M. Gifford, Esquire - NJ ID# 152582015

2900 Fire Road, Suite 200

Egg Harbor Township, New Jersey 08234

609-926-3300

Attorney for Plaintiff

SANDRA SMITH, INDIVIDUALLY AND AS EXECUTRIX OF THE ESTATE OF GEORGE BRADLEY SMITH, AND AS GUARDIAN AD LITEM FOR HER CHILDREN KOLE SMITH AND BRANDY SMITH, NICOLE GAETA, KYLE SMITH;

Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

SUPERIOR COURT OF NEW JERSEY
CAPE MAY COUNTY - LAW DIVISION

DOCKET NO.

Civil Action

PLAINTIFFS' MEMORANDUM OF LAW IN SUPPORT OF PLAINTIFF'S APPLICATION FOR AN ORDER TO SHOW CAUSE

PRELIMINARY STATEMENT

Plaintiffs, Sandra Smith, individually and as executrix of the estate of her late husband George Bradley Smith (hereinafter "Brad Smith"), and as Guardian Ad Litem for Her Children Kole Smith and Brandy Smith, and Nicole Gaeta and Kyle Smith, the adult children of Brad Smith bring this application for an Order to Show Cause. Plaintiffs' application requires the Court to determine if the relief requested should be granted in accordance with R. 4:67. Plaintiffs respectfully submit that the conditions present at the Unprotected Inlet Beach in North Wildwood, New Jersey, constitute a Public Nuisance which has caused Plaintiffs to endure a special injury; namely, the loss of a husband, the loss of a father, the loss of a best friend, and the infliction of severe emotional stress for Brandy Smith. Plaintiffs are seeking to have the City of North Wildwood and the State of New Jersey immediately and permanently be enjoined from allowing public access to the

Unprotected Inlet Beaches, reaching north of 1st Avenue and Surf Avenue until the end of the beach to Surf Avenue.

LEGAL ARGUMENT

I. PLAINTIFFS HAVE STANDING TO BRING THE WITHIN ACTION

Plaintiffs have standing to bring the within action to enjoin the City of North Wildwood and the State of New Jersey from allowing public access on the Unprotected Inlet Beach because the state of New Jersey applies standing requirements liberally and Sandra Smith and Brad Smith, as well as their children and Brad Smith's adult children, have a sufficient stake and real adverseness with respect to the subject matter of this litigation. Additionally, the Unprotected Inlet Beach constitutes a public nuisance and Plaintiffs are entitled to bring an action to enjoin or abate this public nuisance because they have suffered a special injury in that Brad Smith was caused to lose his life as a result of this public nuisance.

With regard to Plaintiffs' standing to bring a public nuisance action, there has been a distinction between public and private rights of action arising from public nuisance. These distinctions are explained in Section 821C of the Restatement (Second) as follows:

Who Can Recover for Public Nuisance

(1) In order to recover damages in an individual action for a public nuisance, one must have suffered harm of a kind different from that suffered by other members of the public exercising the right common to the general public that was the subject of interference. In re Lead Paint Litigation, 191 N.J. 405, 425 (2007).

Generally, standing "refers to the plaintiff's ability or entitlement to maintain an action before the court." New Jersey Citizen Action v. Riveria Motel Corp., 296 N.J. Super. 402, 409 (App. Div.). Certif. granted, 152 N.J. 13 (1997), and appeal dismissed as moot,

152 N.J. 361 (1998). Additionally, the Supreme Court has held that “entitlement to sue requires a sufficient stake and real adverseness with respect to the subject matter of the litigation.” Crescent Park Tenants Ass’n v. Realty Equities Corp., 58 N.J.98,107 (1971). Such a sufficient stake and real adverseness has been described as, “a substantial likelihood of some harm visited upon the plaintiff in the event of an unfavorable decision is needed for the purposes of standing.” Home Builders League of South Jersey, Inc. v. Berlin Twp., 81 N.J. 127,134-35 (1979). In re Adoption of Baby T, 160 N.J.332,340 (1999). Additionally, “our courts have deemed "the threshold for standing to be fairly low." Reaves v. Egg Harbor Township, 277 N.J. Super. 360, 366 (Ch.Div.1994); see also Triffin v. Somerset Valley Bank, 343 N.J. Super. 73, 81 (App.Div.2001) (same). Furthermore, “standing "involves a threshold determination which governs the ability of a party to initiate and maintain an action before the court." Triffin, supra, 343 N.J. Super. at 80, (citing In re Adoption of Baby T, 160 N.J. 332, 340, 734 A.2d 304 (1999)). James v. Arms Technology, Inc., 359 N.J. Super. 291, 320-21 (App.Div. 2003)

The Supreme Court in Home Builders League v. Berlin, opined that, “plaintiffs must show both a sufficient stake in the outcome of the proceedings and that their position is adverse to that of defendants.” 81 N.J. 127, 132 (1979). The Court conceded, “these prerequisites are inherently fluid and "in cases involving substantial public interest * * * 'but slight private interest, added to and harmonizing with the public interest' is sufficient to give standing." Elizabeth Federal Savings & Loan Ass'n v. Howell, 24 N.J. 488, 499 (1957). See also In re Quinlan, 70 N.J. 10, 34-35, cert. den. 429 U.S. 922 (1976). Ibid.

The Supreme Court in Crescent Park Tenants Asso. v. Realty Equities Corp., cited to their earlier opinion in Al Walker, Inc. v. Stanhope, 23 N.J. 657, 661 (1957), the Court noted, that the Stanhope case:

well illustrates the foregoing and New Jersey's broad treatment of the standing issue. There the Borough of Stanhope adopted an ordinance which restricted the use of trailers within its borders. The plaintiff was a retail seller of trailer homes with a place of business in Roxbury Township, about four miles from Stanhope. Alleging that he was harmed by the ordinance, he brought an action to have it declared illegal but his action was dismissed in the trial court for lack of standing. This Court reinstated the action in an opinion which noted that in determining a plaintiff's standing "the court is properly required to balance conflicting considerations and weigh questions of remoteness and degree." 58 N.J. 98, 107-08 (1971).

Here, Brad Smith suffered a harm of a kind much different than that suffered by other members of the public exercising the right common to the general public that was the subject of this interference. Brad Smith suffered the ultimate harm: Brad Smith lost his life. Sandra Smith lost her husband, their two children along with Brad's two older children lost their father. A person walking at the water's edge in ankle deep water would not typically expect to suffer any type of harm. A walk at the water's edge on a beautiful beach day seems like a fairly innocent and safe pass time, that millions of people take part in all over the world every day. More specifically, thousands of beachgoers take part in this activity on a daily basis during the summer months along the water's edge in the City of North Wildwood, New Jersey. A reasonably prudent person may expect that a reasonably foreseeable risk of simply walking in ankle deep water at the water's edge would be that one may step on a sharp shell, get bit by a crab, or get stung by a jelly fish. No one expects is that they will fall off a drop off at the water's edge, into water over their

head, in which a vortex or whirlpool is spinning them around and pulling them under the water. That is exactly what takes place off the Unprotected Inlet Beach in North Wildwood's Hereford Inlet section. The scenic beaches are made more inviting by a public parking lot and city built sea wall where visitors can take in the scenic views, which invite them to join the crowds of sunbathers enjoying all that the beach and its unprotected water ways have to offer.

However, hidden at the water's edge is a public nuisance created by the unique tides that eat away at the beach every time the tide retreats. Due to the whirlpool or vortex like phenomena which takes place, there is a drop off into much deeper water within only a couple feet of the low tide mark. Therefore, a person just walking at the water's edge in ankle deep water, such as Brad Smith and his companions, is in constant danger of essentially falling off a cliff into deep water and strong currents.

Conditions such as these have contributed to at least three fatalities in the past, and remain a constant danger to the general public on a daily basis, especially since North Wildwood and the State of New Jersey do little to warn of the dangers of walking at the water's edge in ankle deep water on this specific stretch of beach and the Unprotected Inlet Beaches are promoted as a prime destination for locals and tourist alike. Brad Smith lost his life as a result of this public nuisance, and for that reason Plaintiffs must exercise their right to have this public nuisance abated so that no one else in the public has to suffer the same ultimate harm, a harm of a kind different from that suffered by other members of the general public when walking at the water's edge on a beautiful beach day.

Furthermore, Plaintiffs possess standing in the instant action due to the fact that they have a sufficient stake and real adverseness with respect to the subject matter of the litigation. As previously mentioned the Appellate Division has clarified that, “only a substantial likelihood of some harm visited upon the plaintiff in the event of an unfavorable decision is needed for the purposes of standing.” Jen. ELEC., Inc. v. County of Essex, 197 N.J. 627,646. (2009). Additionally, the Court conceded that, “these prerequisites are inherently fluid and, ‘in cases involving substantial public interest*** “but slight private interest, added to and harmonizing with the public interest” is sufficient to give standing” Elizabeth Federal Savings & Loan Ass’n v. Howell, 24 N.J. 488,499(1957).

Here, the risk of future harm to the Plaintiffs is admittedly minor, if for no other reason than Brad Smith has already passed away, and Sandra Smith and their children are now well aware of the dangerous conditions at the water’s edge on the Unprotected Inlet Beach. However, the Plaintiffs’ private interests in making sure that the public’s safety is maintained and this beach is permanently shut down so that no other family has to lose a loved one in such a tragic way is substantially harmonized with the public interest that is present within this case. Therefore, Plaintiffs have standing.

There is a strong public interest in this case to have the City of North Wildwood and the State of New Jersey publically acknowledge a deadly risk that is present on the beaches that they promote as safe every summer. This beach must be permanently closed. Not only is the Unprotected Inlet Beach inherently dangerous due to the currents and tides that come in and out of the inlet twice a day,

but these currents and tides have eaten away at the beach in a way that makes the water's edge of the Unprotected Inlet Beach a death trap. On Any given day, more so in the summer, a person, or, multiple people could be standing in ankle deep water at the water's edge and one wrong step could lead to them encountering a drop off, being in water up over their heads, in currents that would be dangerous for even an experienced swimmer. The public interest supports permanently closing the Unprotect Inlet Beach to the public. As such Plaintiffs' private interest of having the City of North Wildwood and the State of New Jersey acknowledge the dangerous conditions and shut the beach down so that no one else loses their life are in perfect harmony with the public interest. Furthermore, the Unprotected Inlet Beach becoming permanently closed to the public is substantially adverse to the City of North Wildwood and the State of New Jersey's Interest.

Plaintiffs' have suffered a special injury in this case, therefore, they are able to establish standing to bring the within action for injunctive relief to have the Unprotected Inlet Beach in North Wildwood permanently closed to the public.

II. The Conditions Present on the Unprotected Inlet Beach Constitute a Public Nuisance Because the Dangerous Conditions Unreasonably Interfere with the General Public's Right to Public Health, the Public Safety, and Public Peace, and These Dangerous Conditions are ongoing and permanent in nature.

The strong currents, drop off, and vortex or whirlpool phenomena off of the Unprotected Inlet Beach constitute a public nuisance because these conditions create an unreasonable interference with the general public's right to public health, public safety, and public peace, and these dangerous conditions are ongoing and

permanent in nature. The Restatement (Second) of Torts defines a public nuisance as follows:

- (1) A public nuisance is an unreasonable interference with a right common to the general public.
 - (2) Circumstances that may sustain a holding that an interference with a public right is unreasonable include the following:
 - a. Whether the conduct involves a significant interference with the public health, the public safety, the public peace, the public comfort or the public convenience, or
 - b. Whether the conduct is proscribed by a statute, ordinance or administrative regulation, or
 - c. Whether the conduct is of a continuing nature or has produced a permanent or long-lasting effect, and, as the actor knows or has reason to know, has a significant effect upon the public right.
- In re Lead Paint Litigation, 191 N.J. 405, 425. (2007).

“The right with which the actor has interfered must be common to all members of the general public, rather than a right merely enjoyed by a number, even a large number of people.” Ibid. A public right is collective in nature. Id. at 426. For instance, the Court explained that, if a stream were contaminated and the contamination prevents the use of a public beach or kills the fish in the stream and so deprives all members of the community of the right to fish or safely sunbath, it becomes a nuisance. Ibid.

Additionally, in James v. Arms Technology, Inc., the Court noted that, “Unlike a private nuisance, a public nuisance does not necessarily involve interference with use and enjoyment of land.” 359 N.J. Super. 291, 329. For example, the Court notes that, “there are those activities that are a public nuisance because the defendant is engaged in a continuing course of conduct that is calculated to result in physical harm or economic loss to so many persons as to become a matter of serious concern.” Ibid. In James, the Court agreed that a public nuisance may exist if the conduct complained of involves a significant interference with the public welfare...” Id. at 330.

“The defendant is held liable for a public nuisance if his interference with the public right was intentional or was unintentional and otherwise actionable under the principles controlling liability for negligent or reckless conduct or for abnormally dangerous activities.” Ibid.

In Gilmour v. Green Village Fire Dept., Inc., the Chancery Division granted injunctive relief to a private plaintiff based on the common law doctrine of Public Nuisance. Plaintiff complained that lights on a nearby recreational field, as well as loud noises emanating from the spectators who assembled to witness the games, kept himself and his family up at night. Plaintiff contended that as a result of the offensive noises which occurred during the playing of the games they became nervous and irritable from lack of sleep due to such noises and the illumination from the arc lights which shown into their house. 2 N.J. Super. 393,395.

Here, each of the conditions encountered on the Unprotected Inlet Beach as well as in the Hereford Inlet can be calculated to possibly result in physical harm to the thousands of people who frequent this area on a daily basis. However, the drop off or shelf which is present at the water’s edge on the Unprotected Inlet Beach at mid to low tide is the pivotal factor in escalating the area from a generally dangerous inlet or waterway to a public nuisance. That is because, without this condition people may enter the inlet knowingly or purposely causing them to struggle with the strong currents which are generally present in Inlets. However, because of the hidden drop off which is located in ankle deep water at the water’s edge during mid to low tide, any beach goer from an infant to an elderly person could be unknowingly take just one step in the wrong direction while simply walking at the water’s edge, and be swept into the dangerous inlet with its strong currents and vortex or whirlpool like phenomena.

The existence of this submerged drop off coupled with the already dangerous conditions of the Hereford Inlet is sufficiently calculated to result in physical harm to any person who steps foot on the Unprotected Inlet Beach as to become a matter of serious concern. Much like a contaminated water way would prevent beach goers from using the associated beach front or fishermen from fishing in that waterway, the drop off paired with the dangerous conditions of the Hereford Inlet deprives the members of the North Wildwood community of their right to safely use the beach. If lack of sleep was sufficient under common law to satisfy a private claim for public nuisance, it follows that Brad Smith's death, as well as the death of two other women due to the drop off and inlet conditions are sufficient to constitute a public nuisance under the Restatement (Second). Additionally, both the Chief and a Lieutenant of the North Wildwood Beach Patrol acknowledged that the dangerous conditions were discussed on a daily basis amongst the lifeguards, and in their personal experience the drop off had necessitated the need for numerous other rescues over the years.

As previously asserted, this public nuisance is continuous and ongoing and poses such a danger to the general public as to cause alarm. Chief Cavalier admitted he has been aware of the drop off for at least ten years. Additionally, the Hereford Inlet Light House Pamphlet makes it clear that the strong currents have been present since the Inlet's inception. Moreover, J. Richard Weggel, Ph.D., P.E., D.CE, has opined that he must strongly recommend that the Unprotected Inlet Beach at Hereford Inlet, North Wild, NJ, must be closed. Dr. Weggel came to this conclusion predominately because the conditions are *persistent*, the conditions are below the water line and are not visible, and the conditions are not generally predictable. Lastly, Dr. Weggel maintained that he believes the inlet conditions are a threat to public safety.

The strong currents, drop off, and vortex or whirlpool phenomena which are present off of the Unprotected Inlet Beach constitute a public nuisance because these conditions create an unreasonable interference with the general public's right to public health, public safety, and public peace, additionally the conditions are continuous and ongoing and warrant alarm. Therefore, the Unprotected Inlet Beach must be closed to the public.

III. The City of North Wildwood and the State of New Jersey Know and Have Reason to Know of the Dangerous Conditions Present on the Unprotected Inlet Beach as Established by the Deposition Testimony of Government Officials

The City of North Wildwood and the State of New Jersey know and have reason to know of the dangerous conditions present on the Unprotected Inlet Beach as evidenced by the prior testimony of multiple government officials. As previously noted in James, the Court states that, "a public nuisance may exist if the conduct complained of involves a significant interference with the public welfare or is of a continuing nature or has produced a permanent or long-lasting effect, and, as the actor knows or has reason to know, has a significant effect upon the public right." 359 N.J. Super. 201, 330.

Chief of the North Wildwood Beach Patrol, Tony Cavalier stated in his deposition that about twelve years ago the issue of placing a lifeguard on the Unprotected Inlet Beach was raised, however, when Chief Cavalier and the former North Wildwood Mayor walked on the beach and informally poled the residents of North Wildwood, approximately ninety percent were against the idea, because "they wanted to be able to do what they want." Therefore, a lifeguard was not placed on the unprotected inlet beach.

Additionally, Chief Cavalier testified that at certain times of day, when the tide is changing, there is a drop off along that section of the beach, where it "literally drops off."

Chief Cavalier noted that the drop off moves from season to season within a tenth of a mile, but it is always there. Chief Cavalier admitted that there are no signs warning of said drop off, nor are there signs that warn of any danger of simply walking at the water's edge. Chief Cavalier pointed out that the drop off is not visible, as it is hidden by water at low tide, when it falls right at the water's edge. The drop off stretches about ten to fifteen yards. Chief Cavalier is of the opinion that if someone were to encounter the drop off, the water would be over their head. Chief Cavalier testified that he has been aware of the drop off for at least ten years. Additionally, Chief Cavalier testified that the other lifeguards are aware of the drop off and that all of the lifeguards discuss the drop off and the risk associated with the drop off amongst themselves. At his deposition Chief Cavalier he could venture a guess at what happened to Brad Smith due to some of the rescues that had taken place in the past and his personal experience and knowledge of the drop off.

Furthermore, Chief Cavalier testified that every time the back bay moves out to the ocean a visible "vortex or whirlpool" is created. This was a "vortex or whirlpool" that in Chief Cavalier's opinion an average swimmer would not be able to swim through.

Lieutenant Lindsay of the North Wildwood Beach Patrol also testified that he was aware of the dangerous created at the Unprotected Inlet Beach. Lieutenant Lindsay testified that he used to listen to the police radio in anticipation of a drowning incident on the Unprotected Inlet Beach. Lieutenant Lindsay was aware of the strong currents and world pool/vortex like phenomena and the drop off. In Lieutenant Lindsay's opinion the only way to prevent future drownings on the Unprotected Inlet Beach is to permanently close the beach.

Various other city officials were aware of the dangerous conditions present on the Unprotected Inlet Beach as the former Mayor commented publicly about the

vortex/whirlpool phenomena. Additionally, the fire department patrols the inlet in case of emergencies, and the police are often called to the scene to assist with water rescues off the Unprotected Inlet Beach. Furthermore, there was at least one other incident which lead to two other drowning deaths that occurred in almost the same exact fashion as the Brad Smith incident.

Lastly, the State of New Jersey knows and has reason to know of the dangerous conditions present on the Unprotected Inlet Beach because the New Jersey Marine Police often patrolled the Hereford Inlet. The Marine Police would respond to water rescues, drownings, missing persons, jet skiers in distress, and one Marine Police Officer even road by Brad Smith on the day of his drowning. The officer was on his way to save a stranded Jet Skier and did not see Brad Smith, but he was later made aware of the situation. Additionally, Dr. Farrell is the Director of the Coastal Research Center located at Richard Stockton College, Dr. Farrell studies the North Wildwood Beaches including the Unprotected Inlet Beach and makes replenishment suggestions to the City of North Wildwood every year, and accordingly, Dr. Farrell was aware of the geographical conditions of the Unprotected Inlet Beach.

The City of North Wildwood and the State of New Jersey know and have reason to know of the dangerous conditions present on the Unprotected Inlet Beach as evidenced by the prior testimony of multiple government officials.

IV. The City of North Wildwood and the State of New Jersey have Control over the Unprotected Inlet Beach

The City of North Wildwood and/or the State of New Jersey have control over the Unprotected Inlet Beach. The Court in Hackensack Riverkeeper, Inc., v. New Jersey Dept.



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of Environmental Protection recognized that, "The Legislature had specifically granted municipalities the authority to exercise their police powers over publicly-owned lands." 443 N.J. Super. 293, 304 (App. Div. 2015). Additionally, the Court noted that "seashore municipalities have exclusive control over municipally owned beaches." Idib. As noted in State of New Jersey v. Oliver, et als. N.J.S.A. 40:48-1(9) empowers municipalities to make and enforce ordinances to, among other things, "regulate or prohibit swimming or bathing in the waters of, in, or bounding the municipality." 320 N.J. Super. 405, 414 (App. Div. 1999). The municipalities are also authorized to "establish, maintain, regulate, and control a lifeguard upon any beach within or bordering on the municipality." Ibid. Furthermore, the Statute grants the municipalities, "the governing body of any municipality bordering on the Atlantic ocean . . . exclusive control, government and care thereof and of any boardwalk, bathing and recreational facilities, . . . and it may, by ordinance, make and enforce rules and regulations for the government and policing of such lands, boardwalk, bathing facilities." Ibid. The Court concluded that there can be little doubt that the municipality may appropriately regulate activities on the beach and waters bounding the municipality. Ibid.

Most notably the Court stated:

The right of the public to enjoy that property encompassed by the doctrine is not inconsistent with the right of the sovereign, as trustee, to protect those utilizing such property. This is the essence of the government's inherent authority, if not its obligation, to act in the interest of the public safety and welfare, an issue we address more fully infra. See Matthews, supra, 95 N.J. at 332; Van Ness v. Borough of Deal, 78 N.J. 174, 178 (1978) ("Of course, the municipality in the exercise of its police power and in the interest of public health and safety, would have the right to adopt reasonable regulations as to the use and enjoyment of the beach area."). Such action may take the form of the legitimate exercise of police power, for example, to close beaches and preclude use of property, even that falling within the Public Trust Doctrine, when

the public safety and welfare is threatened. From such authority the sovereign can confer jurisdiction and cede regulatory authority to municipalities and their courts. The Legislature has vested such authority and jurisdiction in the Borough and its municipal court. Defendants' arguments to the contrary are rejected. Id. at 415-16.

Additionally, in James, the Court noted:

there is no requirement that a defendant have the kind of control defendants suggest—actual control over the instrumentality of the nuisance at the time and place it does harm. Contributing to a public nuisance through or with the conduct of others is sufficient for liability if the defendant knew or should have known the consequences. 359 N.J. Super. 291, 332.

Here, defendants knew of the harms that came from leaving the Unprotected Inlet Beach (1) unprotected, and (2) open to the public. Therefore, this is sufficient conduct for liability because the defendants knew of the consequences. Moreover, in line with the Court's analysis in Oliver, it is within the City of North Wildwood's jurisdiction to enforce rules and to close down the Unprotected Inlet Beach for the welfare of the public. Additionally, the beach and the bordering waters were in the control of North Wildwood in as much as they were responsible for providing lifeguards and protection and enforcing the laws and order.

Even if the Court does not find that to be the case, the State of New Jersey was made aware of the dangerous conditions on the Unprotected Inlet Beach, the State has notice of this Order to Show Cause and the State of New Jersey is a party to this action who can be Order to permanently close the Unprotected Inlet Beach.

V. Injunctive Relief Standard

The Court in Verna v. Links at Valleybrook Neighborhood Ass'n, described equitable relief as follows:

Equitable relief in the form of a permanent injunction is an extraordinary remedy. "A permanent injunction requires proof that the applicant's legal right to such relief has been established and that the injunction is necessary to prevent a continuing injury.... Such relief, though must not be more extensive than is reasonably required to protect the party's interest in whose favor it is issued. 371 N.J. Super 77, 89 (App. Div. 2004)

Additionally, the Restatement (Second) of Torts §936 (1977), provides, that relevant factors in determining an application for permanent injunctive relief are as follows:

(1)The character of the interest to be protected; (2) the relative adequacy of the injunction to the plaintiff as compared with other remedies; (3) the unreasonable delay in bringing suit; (4) any related misconduct by plaintiff; (5) the comparison of hardship to plaintiff is relief is denied, and hardship to defendant if relief is granted; (6) the interests of others, including the public; and (7) the practicality of framing the order or judgment.

CONCLUSION

The conditions which are present at the Unprotected Inlet Beach in North Wildwood, New Jersey, constitute a Public Nuisance which has caused Plaintiffs to endure a special injury, as Brad Smith was caused to lose his life due to the drop off which was present on the Unprotected Inlet Beach, as well as the vortex or whirlpool phenomena. The dangerous conditions which are present on the Unprotected Inlet Beach paired with the City of North Wildwoods constant promotion of the Unprotected Inlet Beach and failure to provide lifeguards constitute a public nuisance. The dangerous conditions are continuous


and ongoing, and Dr. Weggel has stated that the conditions will remain persistent and the beach must be closed for the safety of the general public to prevent future drownings.

The City of North Wildwood and the State of New Jersey knew and had reason to know of the public nuisance as numerous public officials had been notified and also had personally seen the conditions and were aware of their combined dangers. The City of North Wildwood had exclusive control to make and enforce rules governing the North Wildwood Beaches, the City of North Wildwood also had a duty to provide life guards and other protection for the waters off of the North Wildwood Beaches, and in the event that the Court finds that the water's edge where the event took place is tide lands and controlled by the State of New Jersey, the State of New Jersey was on notice of the dangerous conditions and patrolled the area frequently.

Accordingly, Plaintiffs now seek to have the City of North Wildwood and the State of New Jersey immediately and permanently enjoined from allowing public access to the Unprotected Inlet Beaches, reaching north of 1st Avenue and Surf Avenue until the end of the beach at the sea wall.

Dated: October 4, 2016

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SANDRA SMITH, INDIVIDUALLY AND AS EXECUTRIX OF THE ESTATE OF GEORGE BRADLEY SMITH, AND AS GUARDIAN AD LITEM FOR HER CHILDREN KOLE SMITH AND BRANDY SMITH, and NICOLE GAETA, KYLE SMITH;

Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

SUPERIOR COURT OF NEW JERSEY
CAPE MAY COUNTY
LAW DIVISION

DOCKET NUMBER: CPM-L-

CIVIL ACTION

ATTORNEY CERTIFICATION

Kasi M. Gifford, Esquire, of full age, hereby certifies:

1. I am a member of the law firm of D'Amato Law Firm, P.C., Attorneys for Plaintiff, Sandra Smith, individually and as Executrix of the Estate of George Bradley Smith, and as Guardian Ad Litem for her children Kole Smith and Brandy Smith, and Nicole Gaeta and Kyle Smith and am entrusted with the preparation of this case.
2. Attached hereto and made a part hereof at Exhibit A-1-A-14 are true and accurate copies of still aerial photographs of the Hereford Inlet taken by a drone on July 31, 2014.
3. Attached hereto and made a part hereof at Exhibit B-1 is a true and accurate copy of the Aerial Video Examination of the Hereford Inlet taken by drone on July 31, 2014.
4. Attached hereto and made a part hereof at Exhibit C-1 is a true and accurate copy of Cape May County Planning Department Aerial Photographs of the Hereford Inlet from 1920 through February 22, 2013.
5. Attached hereto and made a part hereof at Exhibit D-1-D-243 are true and accurate copies of Aerial Photographs taken from Helicopter of the Hereford Inlet on March 1, 2016.

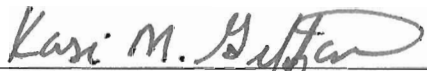
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D'AMATO
LAW FIRM

COUNSELORS AT LAW
A PROFESSIONAL CORPORATION

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6. Attached hereto and made a part hereof at Exhibit E-1 is a true and accurate copy of a photograph which illustrates two City of North Wildwood Police Officers patrolling the Beach on June 20, 2014.
7. Attached hereto and made a part hereof at Exhibit F-1 is a true and accurate copy of a photograph which illustrates City of North Wildwood Public Works employees working on the Inlet Beach on June 20, 2014.
8. Attached hereto and made a part hereof at Exhibit G-1 is a true and accurate copy of rescue/drowning reports for the years 2010-2015 comprised of data compliments of North Wildwood Police Department, North Wildwood Beach Patrol., and North Wildwood Fire Department.
9. Attached hereto and made a part hereof at Exhibit H-1 is a true and accurate copy of North Wildwood Resolutions designating the Lifeguard Protected Beaches from the years 2004 to 2011.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.


Kasi M. Gifford, Esquire
Attorney for Plaintiff

Dated: 10/4/16

D'AMATO LAW FIRM

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SANDRA SMITH, INDIVIDUALLY AND AS EXECUTRIX OF THE ESTATE OF GEORGE BRADLEY SMITH, AND AS GUARDIAN AD LITEM FOR HER CHILDREN KOLE SMITH AND BRANDY SMITH, NICOLE GAETA, KYLE SMITH;

Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

**SUPERIOR COURT OF NEW JERSEY
LAW DIVISION-CAPE MAY COUNTY
DOCKET NUMBER: L-**

Civil Action

**CERTIFICATION OF
J. RICHARD WEGGEL, Ph.D., P.E., D.CE**

I, J. Richard Weggel, Ph. D., P.E., D.CE, of full age, hereby certify the following:

1. Attached hereto and made a part hereof is a true and accurate copy of my report dated April 19, 2016, titled, "Conditions in Hereford Inlet, North Wildwood, NJ, Leading to the Drowning Death of Mr. Brad Smith, 27 July 2012."

2. Attached hereto and made a part hereof is a true and accurate copy of my supplemental report, dated July 18, 2016, titled, "Addendum To: Conditions in Hereford Inlet, North Wildwood, NJ, Leading to the Drowning Death of Mr. Brad Smith, 27 July 2012."

3. Attached hereto and made a part hereof is a true and accurate copy of my curriculum vitae.

4. I am prepared to come to Court in order to provide testimony in support of this Order to Show Cause, to explain to the Court why more people will drown if the Unprotected Inlet Beach is not permanently closed.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



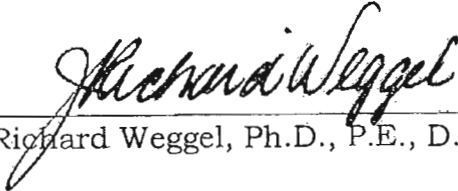
Richard Weggel

Dated: 28 Sept ., 2016

**CONDITIONS IN HEREFORD INLET, NORTH WILDWOOD, NJ, LEADING TO
THE DROWNING DEATH OF MR. BRAD SMITH, 27 JULY 2012.**

prepared for
D'Amato Law Firm
2900 Fire Road, Suite 200
Egg Harbor Township, New Jersey 08234

prepared by
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19 April 2016

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INTRODUCTION

On 27 July 2012 Mr. Brad Smith and his daughter Brandi were walking along the Hereford Inlet shoreline in North Wildwood, NJ, along with Mr. Scott Sunderland and his daughter Ally. While walking in ankle-deep water, the beach beneath their feet gave way and they were swept into the inlet. Mr. Sunderland and his daughter were able to make their way back to shore. A jet-skier was able to rescue Brandi Smith; however, Mr. Smith was carried offshore. His body was recovered three days later; the cause of death was accidental drowning. The location where they were walking when the incident occurred was on the inlet beach at approximately Central Street extended. This report presents an analysis of conditions in Hereford Inlet which led to the drowning of Mr. Smith and the likelihood that similar conditions could reoccur.

TIDAL INLET PROCESSES

Tidal Inlet Hydraulics

Tidal inlets are waterways that connect the ocean with inland bays. The flow of water through inlets is driven by both astronomical tides and storm tides. Astronomical tides are the result of the gravitational attraction of both the moon and sun. The rotation of the earth-moon-sun system about the center of mass of the three bodies results in two tidal bulges, one on each side of the earth. Twice each month when the moon and sun are nearly aligned, the high tides produced by them are superimposed leading to higher than average high tides. These are termed "spring tides." During other times of the month lunar and solar high tides occur at different times during the day. When they oppose each other the lower than average tides are termed "neap tides."

During high tide in the ocean water flows from the ocean to the back bay and the bay's water level rises. However, by the time the water level in the bay has reached its maximum, the water level in the ocean has begun to go down and the direction of flow reverses flowing from the bay back to the ocean. Thus the water level in the bay is always trying to "catch up" with the water level in the ocean.

The direction of flow in the inlet reverses over a tidal cycle. When the water level in the ocean is above that in the bay, the flow (termed flood flow) is from the ocean into the bay. When the water level in the bay is higher than the water level in the ocean the flow (termed ebb flow) is from the bay to the ocean. Figure 1 is a schematic diagram of the ocean water level, the bay water level and the flow velocity in the inlet (Escoffier, 1977). (Also, see the blue bidirectional arrow on Figure 2.) The maximum ebb current velocity occurs when the ocean tide level is below the bay tide level. Maximum ebb velocity generally occurs on a falling ocean tide when the ocean tide is below mean sea level.

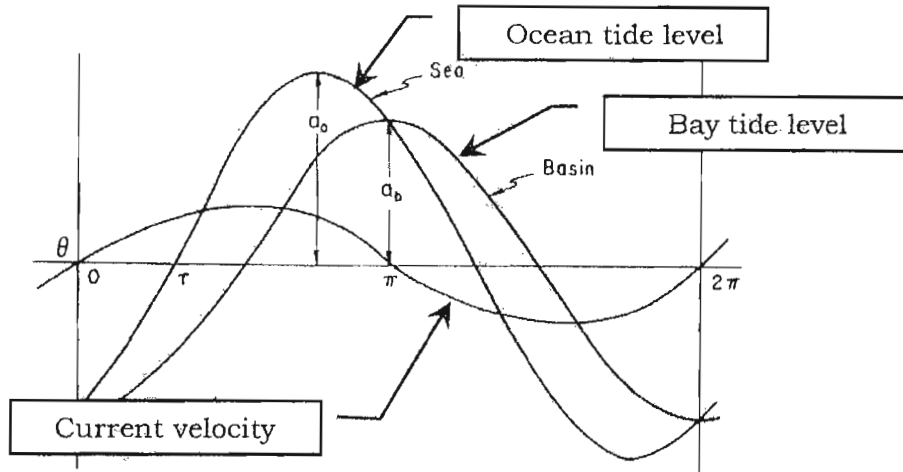


Figure 1 Schematic of Ocean Water Level, Bay Water Level and Tidal Current Velocity (Escoffier, 1977).



Figure 2 Hereford Inlet Showing Longshore Sediment Contributions from North Wildwood and Stone Harbor Beaches (White Arrows) and Flood and Ebb Currents (Bidirectional Blue Arrow) (Google Earth, 21 June 2015).

Inlet Sediment Processes

Tidal inlets are sediment traps. Much of the erosion that occurs along ocean coastlines is due to sand being carried into and retained by inlets. Sand is carried along ocean beaches by a process termed longshore transport which is the result of waves breaking at an angle with the shoreline. Breaking waves lift sediment into the water column by agitating the sand on the bottom. If the waves approach the shoreline at an angle, they also exert a stress on the water which carries the suspended sand along the shoreline. Thus, waves approaching the shoreline from the southeast will drive the current and sand northward. Waves approaching from the northeast will carry sand southward. See the white arrows on Figure 2.

NORTH WILDWOOD AND HEREFORD INLET PROCESSES

When waves approach North Wildwood from the southeast, they carry sand into Hereford Inlet. Thus the ocean beach in North Wildwood is the source of sand for North Wildwood's Hereford Inlet beach. However, when waves approach from the northeast they carry sand from Stone Harbor's beaches into the inlet. Generally, more sand enters the inlet from Stone Harbor than enters from North Wildwood. Along southern New Jersey beaches sand transport is predominantly southward because storm waves during the winter months most often approach shore from the northeast. During the summer months, waves most often approach from the southeast to carry sand northward, however, at a lesser rate because the waves are generally smaller. Thus, at Hereford Inlet more sand enters the inlet from the Stone Harbor side. The sand entering from Stone Harbor pushes the inlet navigation channel southward against the North Wildwood side. Thus the deep channel hugs the southerly side of the inlet. This navigation channel alignment is apparent from inlet surveys and aerial photos. Deep water almost always exists adjacent to the southerly inlet shoreline due to the influx of sand from Stone Harbor.

The Hereford Inlet beaches are reworked by ebb and flood currents exiting and entering the inlet. During flood flow, sand is carried into the inlet; during ebb flow sand is carried out. Some of the sand carried out is deposited on an ebb shoal when the ebbing current is slowed as it disperses in the ocean. The ebbing flow reworks the sand adjacent to the North Wildwood inlet shoreline and results in steep underwater slopes as evidenced by the deep water close to shore.

TIDES

Tides at Hereford Inlet are semi-diurnal with two highs two lows per day. The period of the primary tidal constituent is approximately 12 hours and 25 minutes. Astronomical tides (lunar and solar constituents excluding storm tides) are predicted for the ocean pier in Wildwood Crest, NJ, by the National Oceanographic and Atmospheric Agency's, National Ocean Service (NOAA, 2016). Tidal datums at Wildwood Crest are shown in Figure 3. The nearest location where tides are measured is Atlantic City, Tides at Hereford Inlet are

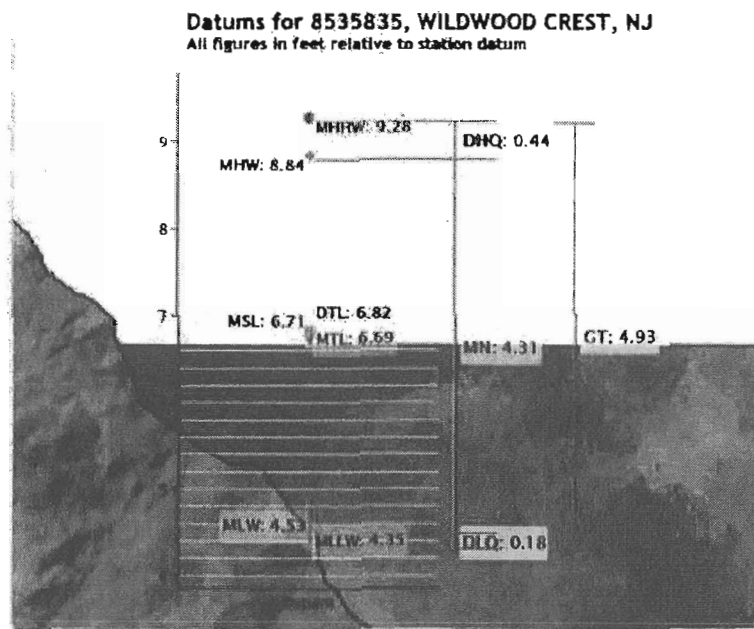


Figure 3 Tidal Datums at Wildwood Crest, NJ.

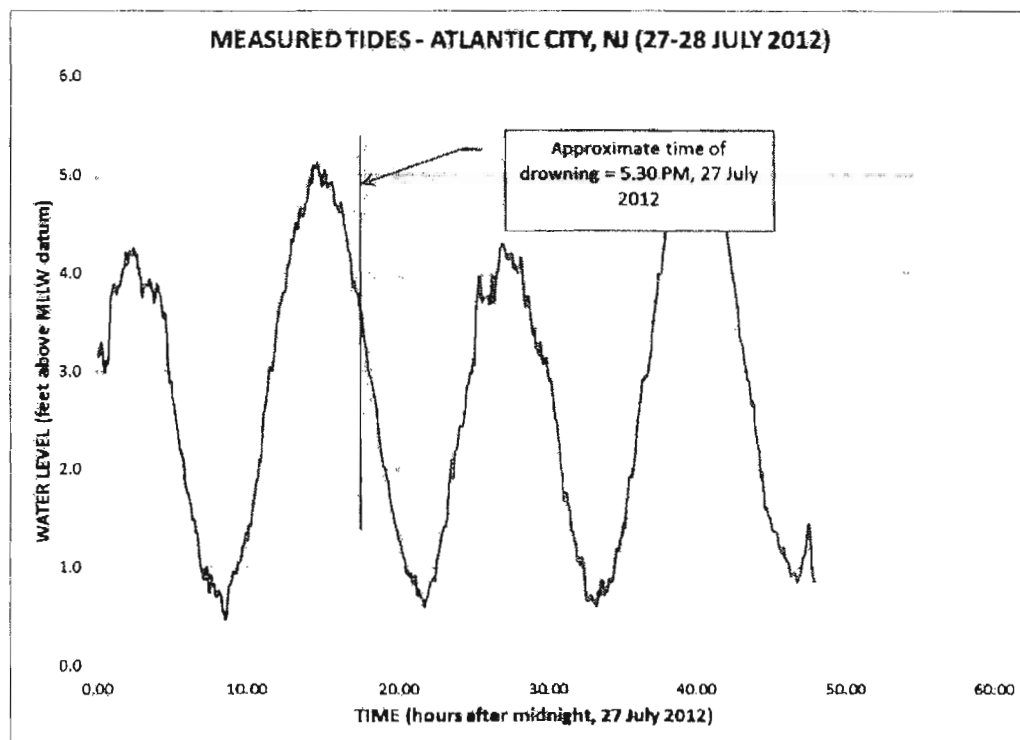


Figure 4 Tides Measured at Atlantic City, NJ, Showing Approximate Time of Drowning.

nearly synchronous with tides at Atlantic City differing by only about 3 to 5 minutes. Based on the description of events surrounding the drowning of Mr. Smith, the inlet current was flowing seaward and carried him into the ocean. Figure 4 shows the tide measured at Atlantic City at about the time of the drowning. The estimated time of the event, based on the deposition of Mr. Scott Sunderland and the tidal curve, is 5:30 PM on 27 July 2012 – during a falling tide when the water level was a little above mean sea level (MSL). This is approximately the time just preceding maximum ebb flow.

NORTH WILDWOOD INLET BEACH CONDITIONS AT THE TIME OF DROWNING

It is the writer's opinion that Brad Smith and his companions were swept into the inlet due to the failure of the underwater slope near the inlet beach. A deep hole adjacent to the North Wildwood inlet shoreline is a persistent feature along this beach. Mr. Smith and his companions walking in shallow water on the beach next to the deep channel exerted a surcharge (downward force) on the top of the slope which resulted in the beach sloughing into the channel carrying Mr. Smith and his companions into the ebbing current.

The Stockton Coastal Research Center (CRC) takes periodic surveys of Hereford Inlet for the New Jersey Department of Environmental Protection, Bureau of Coastal Engineering . Figure 5 is a CRC survey made around the time of Mr. Smith's drowning. Data were taken on 25, 26, 30 and 31 July 2012 to produce this survey. Shown on the figure is an area of closely spaced bathymetric contours indicating a steep slope at the approximate location where Mr. Smith was swept into the inlet. Figure 6 is a detail of that area. (Additional CRC surveys that show deep holes and steep slopes adjacent to the shoreline are presented in Appendix A.) In addition to the CRC surveys, the U.S. Army Corps of Engineers (COE) conducted Hereford Inlet bathymetric surveys in 2010, 2012 and 2014. Figure 7 shows the 2012 COE survey and Figure 8 is a detail from that survey. Four cross-sections from the 2012 survey are shown in Figure 9. (The three COE surveys along with profiles through the inlet for each survey are presented in Appendix B.)

The stable angle of an undisturbed, submerged, quartz sand slope ranges within a few degrees of 33° (Evans, 1995). The factor of safety for an undisturbed underwater slope is given by (Eckert & Callender, 1987),

$$F = \frac{\tan(\varphi)}{\tan(\theta)}$$

where F = the factor of safety, φ = the submerged angle of repose of the slope (approximately 33°) and θ = the angle the slope makes with a horizontal. A factor of safety greater than 1.0 indicates a stable slope. A factor of safety less than 1.0 indicates an unstable slope. The factor of safety against a slope failure during a falling tide when seepage from the beach into the inlet is occurring is given by (Eckert & Callender, 1987),

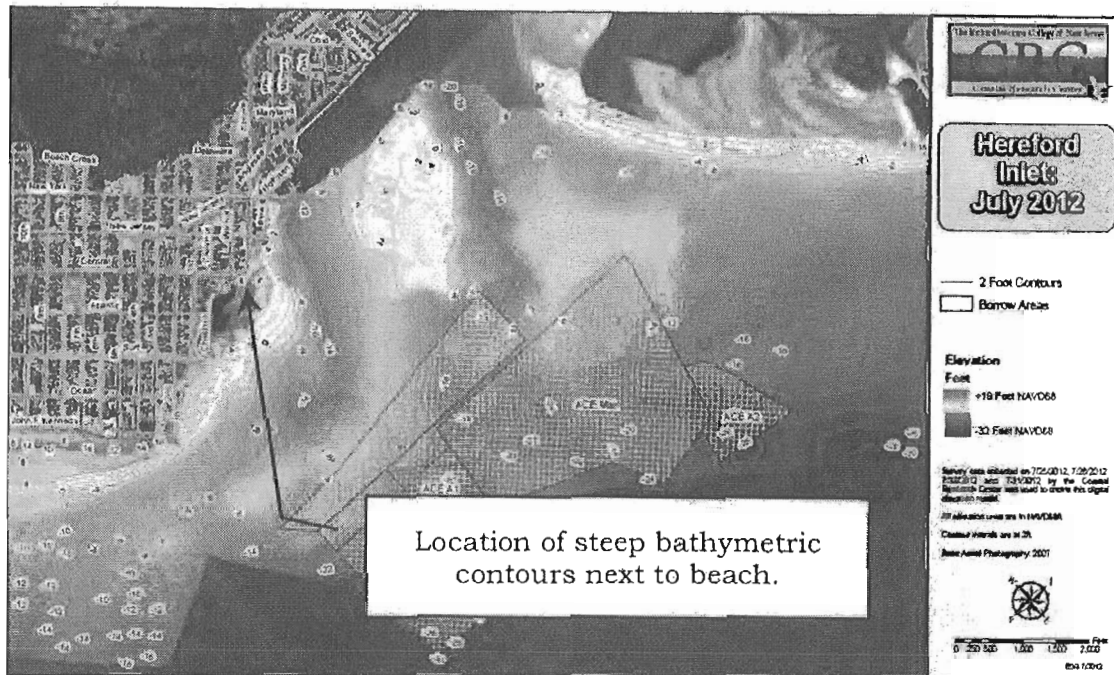


Figure 5 Hereford Inlet Survey, July 2012 (Stockton Coastal Research Center, 2012a)

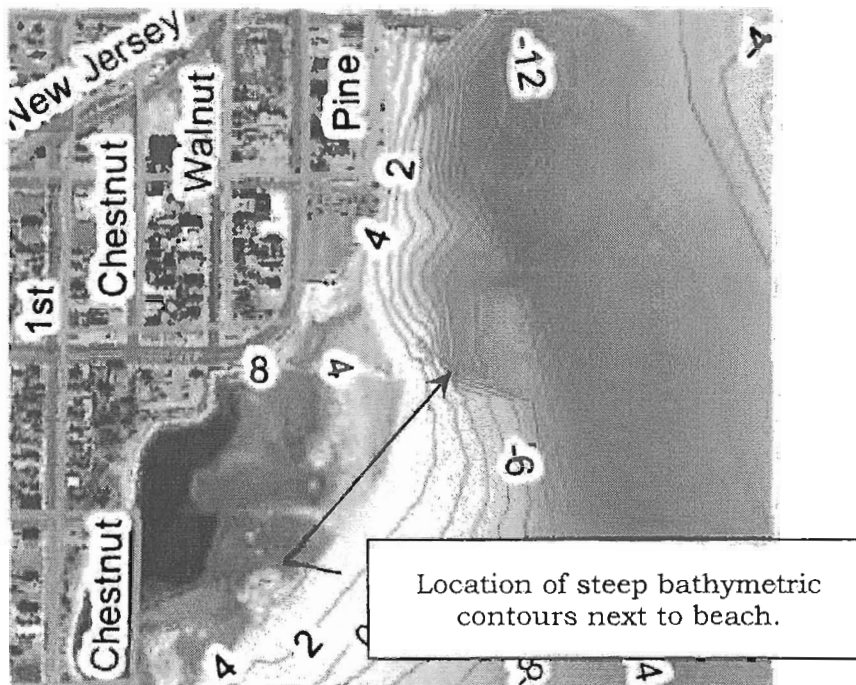


Figure 6 Detail of July 2012 Stockton Coastal Research Center Survey (Stockton Coastal Research Center, 2012a).

$$F = \frac{\gamma_b \tan(\varphi)}{\gamma \tan(\theta)}$$

where γ = the unit weight of the saturated sand (approximately 124.6 lb/ft³) and γ_b = the weight of the submerged sand (approximately 60.6 lb/ft³).

Table 1 presents slope angles obtained from the CRC and COE surveys along with the factors of safety given by the above two equations. The slopes for the CRC surveys were scaled from the contour lines on the figures in Appendix A. The slopes for the COE surveys were taken directly from cross-sections through the inlet as surveyed by the Corps. Example cross-sections from the 2012 COE survey are shown in Figure 9. The locations of the COE cross-sections of Figure 9 are shown in Figures 7 and 8. Table 1 shows three cases with seepage-induced by ebb flow where the factor of safety was below or close to 1.0 (values highlighted in last column). In one case the slope was unstable even in the absence of seepage (value highlighted in fourth column). Note that the factors of safety in Table 1 do not account for any surcharge on top of the slope. Figure 10 shows a detail of Profile C from the 2012 COE survey where the slope angle is 48.6° - the condition highlighted on Table 1.

Table 1 Slope Angles and Factors of Safety for Unloaded Slopes from CRC and COE Surveys.

Survey *	$\Delta z / \Delta x$ **	θ	$F = \tan\varphi / \tan\theta$	$F = \gamma_b \tan\varphi / \gamma \tan\theta$
CRC Mar 2011	0.200	11.3°	3.25	1.58
CRC Jul 2012	0.184	10.4°	3.53	1.71
CRC Dec 2012	0.161	9.1°	4.05	1.96
COE 2008 - B	0.230	12.9°	2.83	1.38
COE 2008 - C	0.205	11.6°	3.16	1.54
COE 2008 - D	0.148	8.4°	4.39	2.14
COE 2012 - B	0.070	4.0°	9.28	4.51
COE 2012 - C	1.134	48.6°	0.57	0.28
COE 2012 - D	0.108	6.2°	5.98	2.91
COE 2014 - B	0.138	7.9°	4.68	2.28
COE 2014 - C	0.291	16.2°	2.23	1.08
COE 2014 - D	0.314	17.4°	2.07	1.01

* COE survey indicates profile line from which slope angle was obtained.

** Tangent(θ)

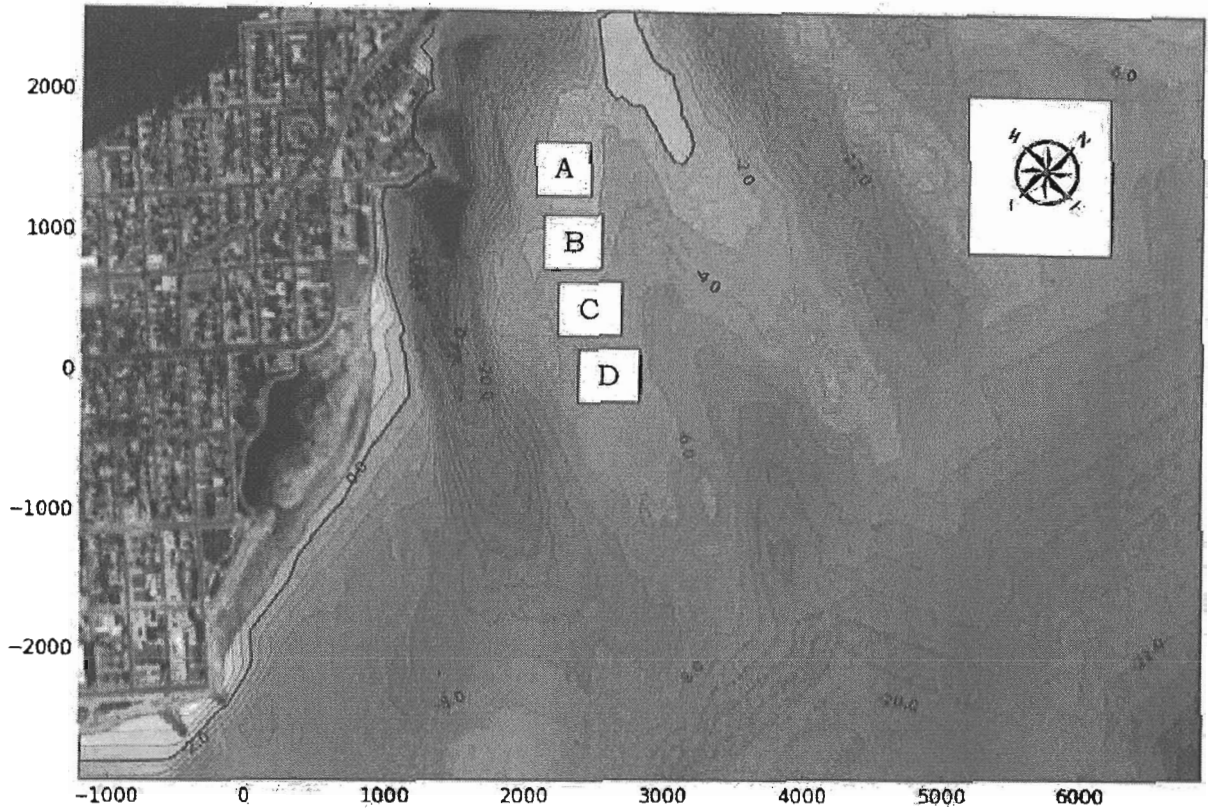


Figure 7 US Army Corps of Engineers Survey, December 2012.

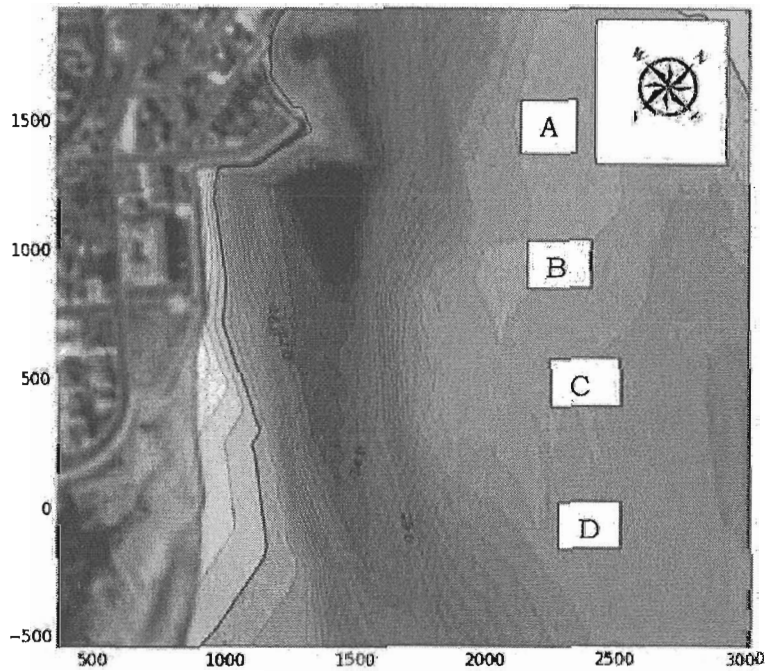


Figure 8 Detail from US Army Corps of Engineers Survey, December 2012.

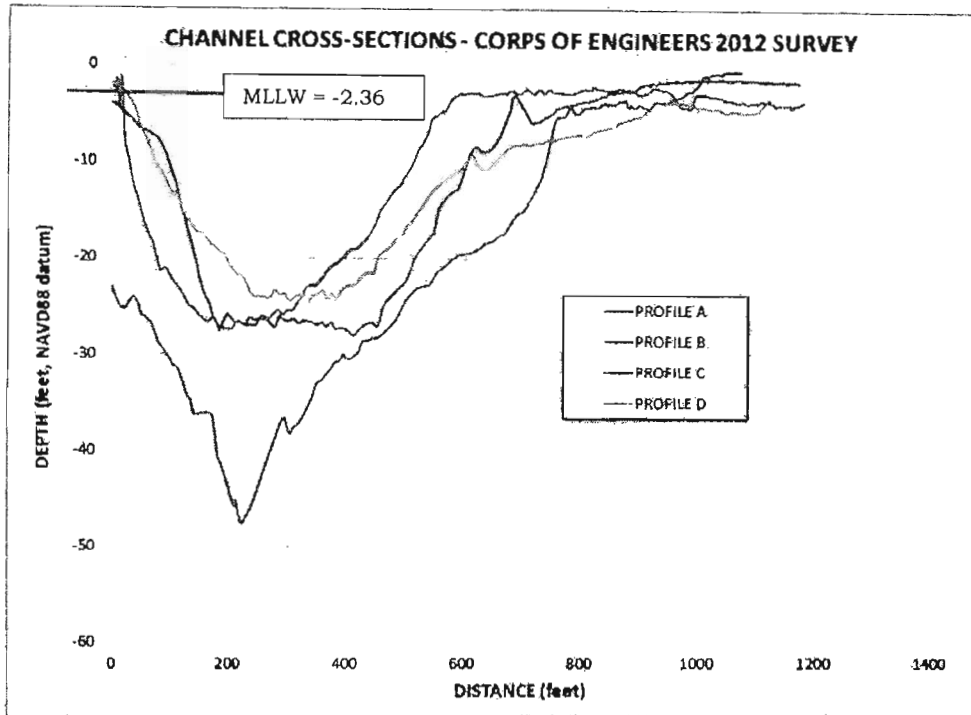


Figure 9 Corps of Engineers 2012 Survey Cross-Sections.

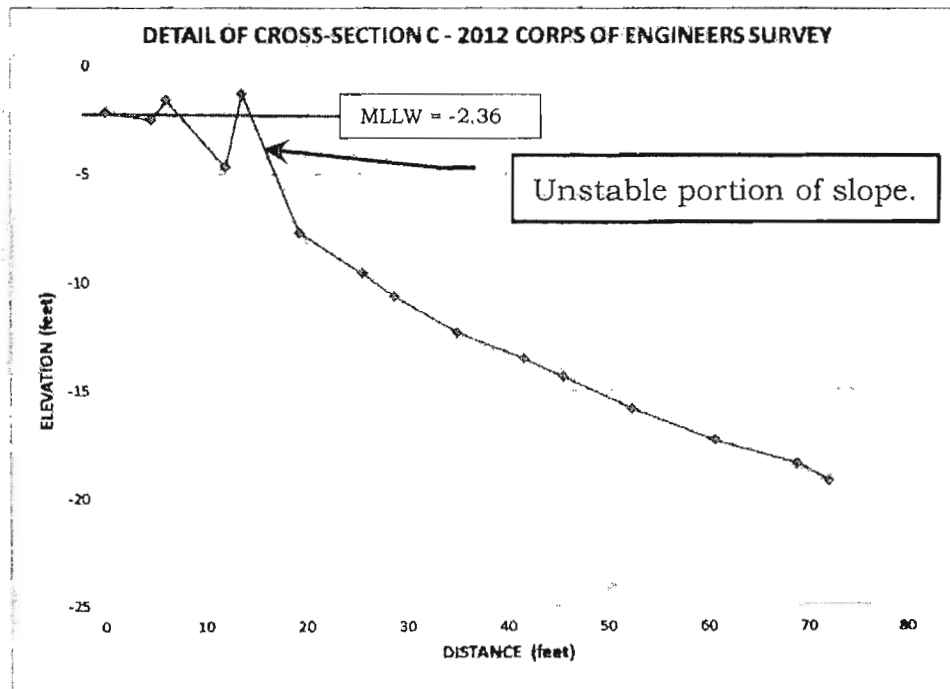


Figure 10 Detail from Cross-Section C, Corps of Engineers 2012 Survey.

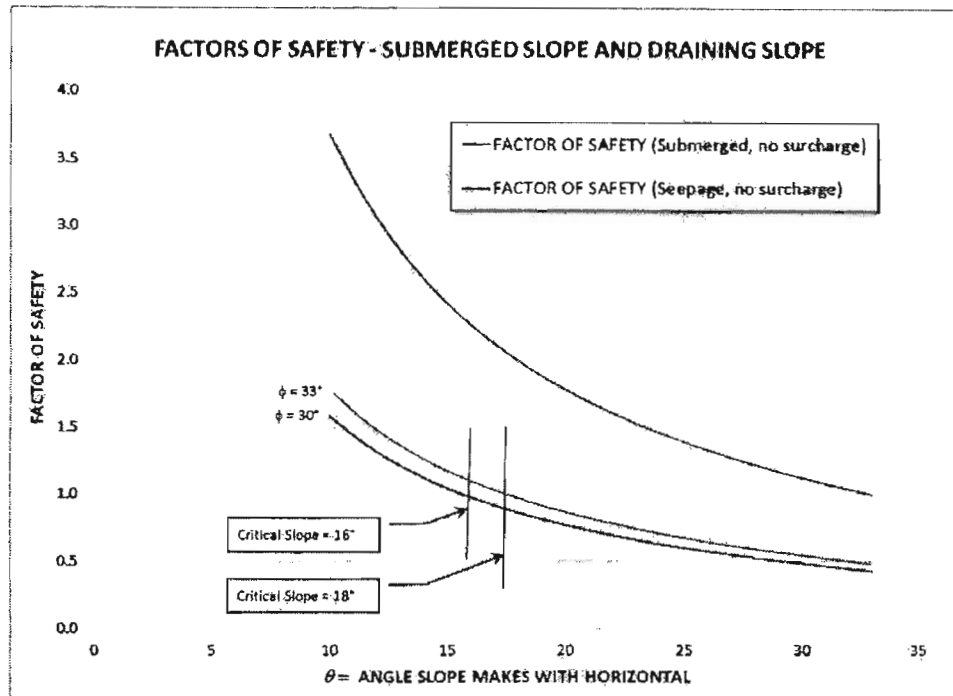


Figure 11 Factors of Safety for Various Submerged Slopes with and without Seepage (no surcharge).

Figure 11 shows the relationship between the factor of safety and the slope angle for both the submerged and seepage equations given above. The curved red lines are for the case where seepage from the slope into the channel occurs. The critical slope for a submerged angle of repose is 33° is 18° . Thus any slope steeper than 18° will be unstable. If the angle of repose is only 30° the critical slope is 16° . The critical angle for the submerged case without seepage is 33° - the submerged slope's angle of repose.

The surveys on which the preceding analyses are based probably did not measure the steepest underwater slopes because of the limited spatial distribution of the soundings. In addition, the surveys do not account for steepening of nearshore, underwater slopes during high ebb flow velocities. Neither does the analysis account for any load applied to the top of the slope. A person walking along the top of the slope will exert a downward force (surcharge) which reduces the factor of safety. If the factor of safety is reduced to less than 1.0, the slope will fail and slide into the inlet carrying with it anyone walking on top of it

Farrell (2013), in an interview, mentions a circular current at the inlet beach as well as "horizontal and vertical" currents that act to undercut the underwater slope and make it unstable.

A slope stability analysis which included a surcharge was made using Bishop's Simplified method of slices - a widely used geotechnical engineering procedure. A schematic of the procedure is shown in Figure 10. A circular

failure plane is assumed and the soil above the failure plane subdivided into vertical slices. The moments of the forces acting on the slices about the center of the failure plane are summed and the factor of safety is the ratio of the sum of the overturning moments divided by the sum of the restoring moments. A uniform surcharge was assumed over 4-foot wide top of the slope, shown as p on Figure 12. The equation for the factor of safety for a non-cohesive sediment such as beach sand is (Cernica, 1982),

$$F = \frac{\sum_{i=1}^{i=n} [(W_i - u_i b_i) \tan \phi] \left[1 / \cos \alpha_i \left(1 + \frac{\tan \alpha_i \tan \phi}{F} \right) \right]}{\sum_{i=0}^{i=n} W_i \sin \alpha_i}$$

where the subscript i indicates the slice, W_i = the weight of slice i , u_i = the pore water pressure, b_i = the width of the slice and α_i = the angle with a vertical of a line drawn from the center of rotation to the bottom of the slice. See Figure 12. An iterative procedure is required since F appears on both sides of the equation. The location of the center of rotation to find the minimum factor of safety is a trial and error procedure.

The surcharge used in the analysis assumed two adults, each weighing 180 lbs with their weight distributed over 4 feet at the top of the slope. A distributed force of $(2)(180)/4 = 90$ lbs/ft results. (Note that the force will likely be more concentrated than a uniformly distributed one.) Figure 13 summarizes the results of the slope stability analysis for three values of the slope's submerged angle of repose, $\phi = 30^\circ, 31^\circ$ and 33° . The lower envelope of the points indicates the stable slope. The three lines generally cross the factor of safety line of 1.0 at between 17° and 19° . Consequently, if the slope is steeper than about 17° the slope is likely to fail if a surcharge is imposed.

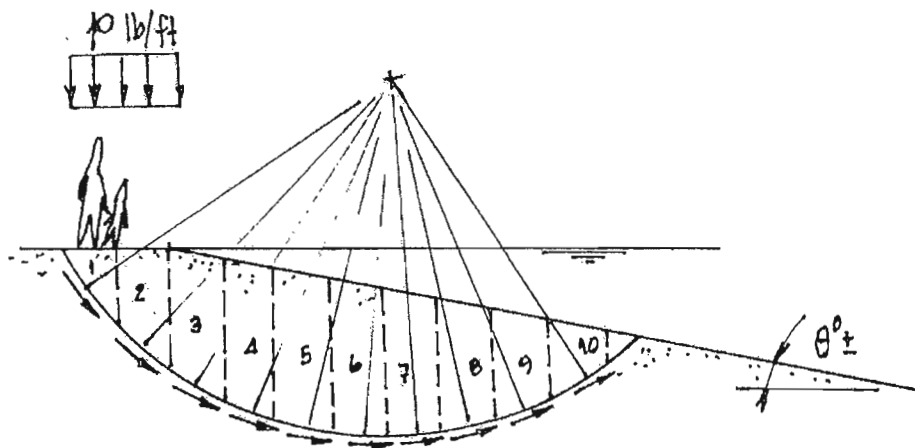


Figure 12 Schematic of Bishop's Simplified Method of Slices for Slope Stability Analyses.

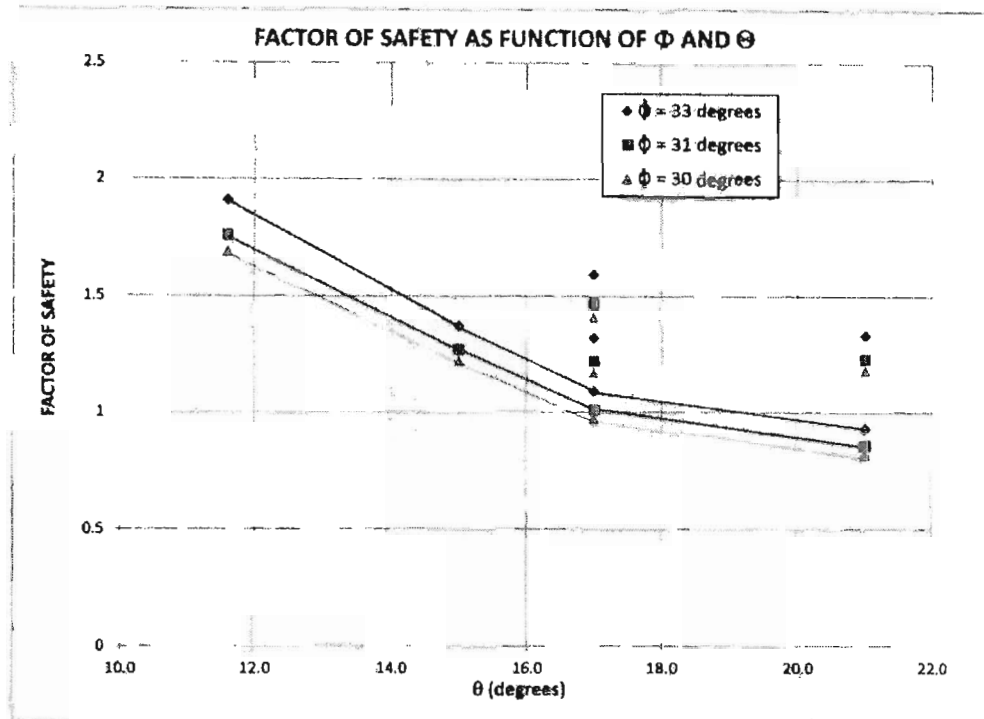


Figure 13 Factors of Safety as a Function of θ and ϕ for Slopes with Surcharge.

SUMMARY AND CONCLUSIONS

On 27 July 2012 Mr. Brad Smith and his daughter Brandi and Mr. Scott Sunderland and his daughter Ally were walking in ankle deep water along the shoreline adjacent to the navigation channel in Hereford Inlet, North Wildwood, NJ. The submerged slope along the top of which they were walking was likely not visible. The slope failed and slid into the inlet carrying Mr. Smith and his companions into the ebb flowing current. The Hereford Inlet shoreline is subject to strong ebb currents which scour the edge of the navigation channel steepening it to the point of instability. The imposition of any surcharge such as pedestrians walking on top of the slope will lead to its failure. A slope stability analysis indicates that if the submerged slope is steeper than about 17° it is subject to failure by the imposition of a surcharge. The steep navigation channel hugs the North Wildwood side of the inlet due to the sand transported into the inlet from the Stone Harbor side. This is a persistent condition observable in the several bathymetric surveys of the inlet conducted by the Stockton Coastal Research Center and the U.S. Army Corps of Engineers. (See Appendixes A and B.) The slope stability conditions and their location on the inlet shoreline that led to the drowning are likely to occur again because of the persistence of the navigation channel's location along the North Wildwood inlet shoreline and the high ebb tide currents. The location of the unstable slope is generally unpredictable and will vary from time to time. Figure 14 is a photograph of the inlet shoreline taken on 1 March 2016 that shows the

presence of the deep channel adjacent to the inlet beach. The area indicated on the photograph is where an ebbing current can undermine the slope causing a failure of the kind leading to Mr. Smith's drowning.

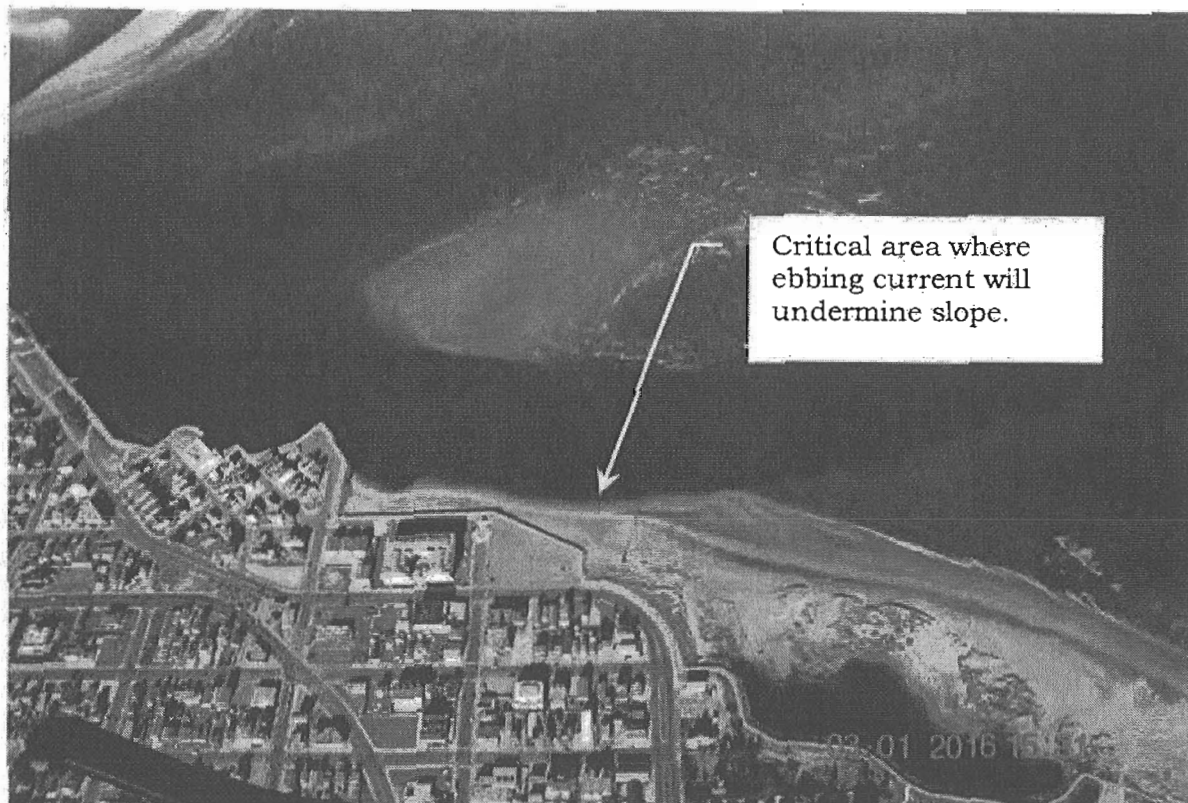


Figure 14 Aerial Photograph of Hereford Inlet Shoreline Showing Location of Area Susceptible to Undermining, 1 March 2016.

REFERENCES

Cernica, J.N. (1982) *Geotechnical Engineering*, Holt, Reinhart & Winston, New York, NY, 1982.

Eckert, J & G. Callender (1987) "Geotechnical Engineering in the Coastal Zone," Department of the Army, Waterways Experiment Station, Corps of Engineers, P.O. Box 631, Vicksburg, MS, 39180-0631, February 1987.

Escoffier, F.F. (1977) "Hydraulics and Stability of Tidal Inlets," GITI Report 13, U.S. Army Coastal Engineering Research Center, Fort Belvoir, VA, August 1977.

Evans, N.C. (1995) "Stability of Submarine Slopes," GEO Report No. 47. Geotechnical Engineering Office, Civil Engineering Department, 101 Princess Margaret Road, Homantin, Kowloon, Hong Kong, June 1995.

Farrell (2013), Interview of Stewart Farrell by A & K Investigations of New Jersey, 1 February 2013.

NOAA (2016) Tide predictions for Wildwood Crest, NJ.
<https://tidesandcurrents.noaa.gov/noaatidepredictions/NOAATidesFacade.jsp?Stationid=8535835>

Stockton Coastal Research Center (2011) "Hereford Inlet, March 2011," The Richard Stockton College of New Jersey, Coastal Research Center, March 2011.

Stockton Coastal Research Center (2012a) "Hereford Inlet, July 2012," The Richard Stockton College of New Jersey, Coastal Research Center, July 2012.

Stockton Coastal Research Center (2012b) "Hereford Inlet, March 2011, Digital Elevation Model" The Richard Stockton College of New Jersey, Coastal Research Center, December 2012.

APPENDIX A
Stockton Coastal Research Center Surveys

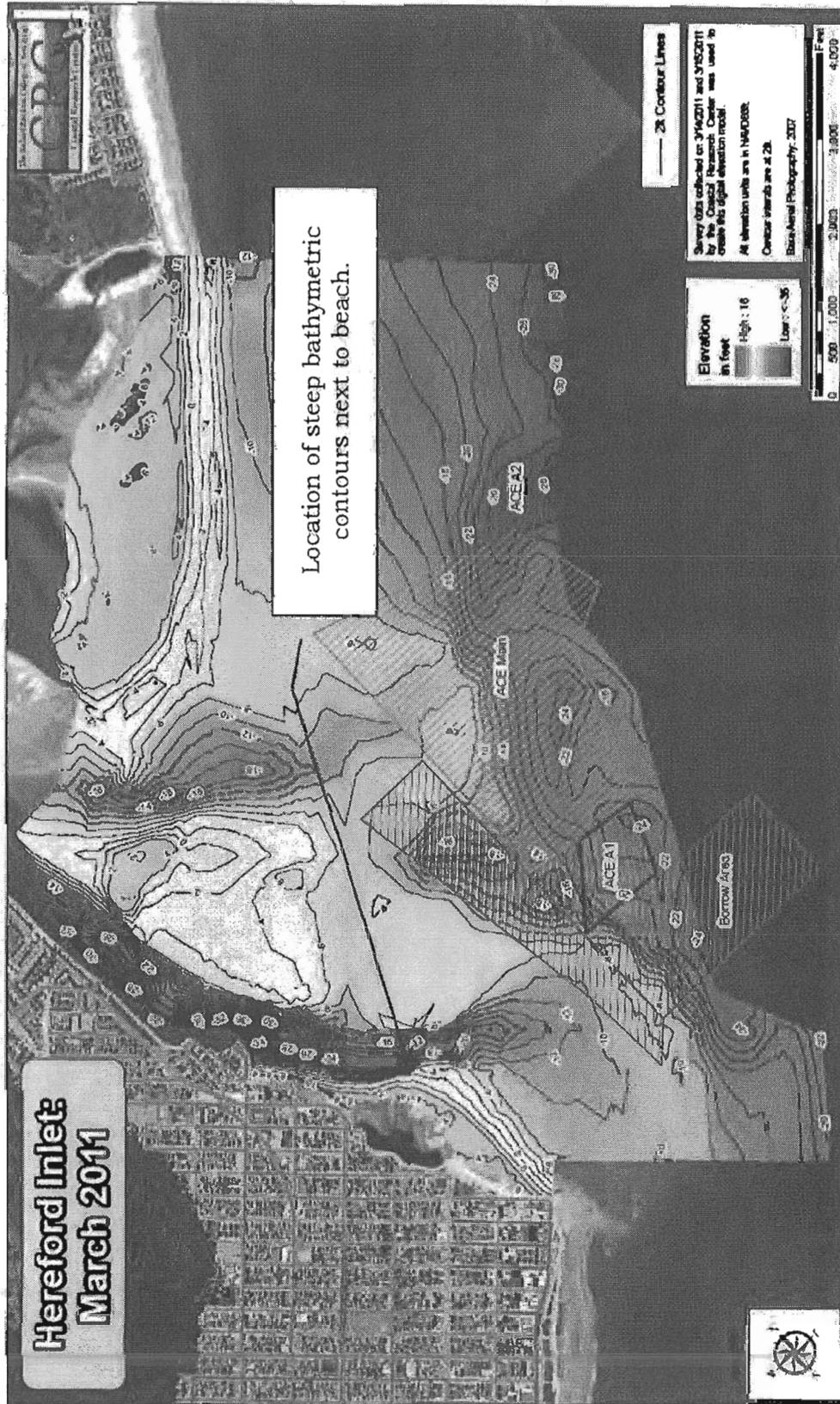


Figure A-1 Hereford Inlet Survey, March 2011 (Stockton Coastal Research Center, 2011a).

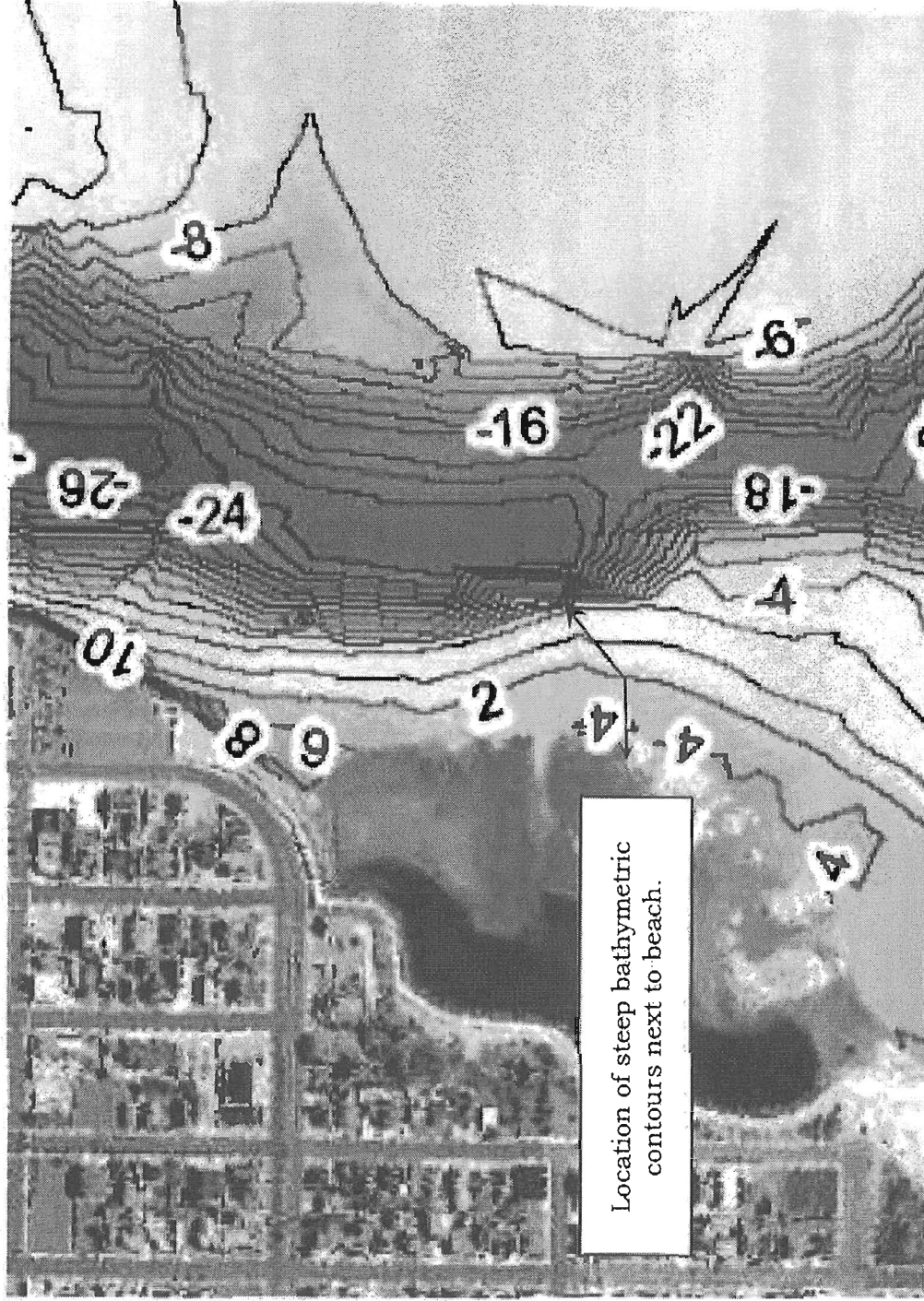


Figure A-2 Detail of March 2011 Stockton Coastal Research Center Survey (Stockton Coastal Research Center, 2011).

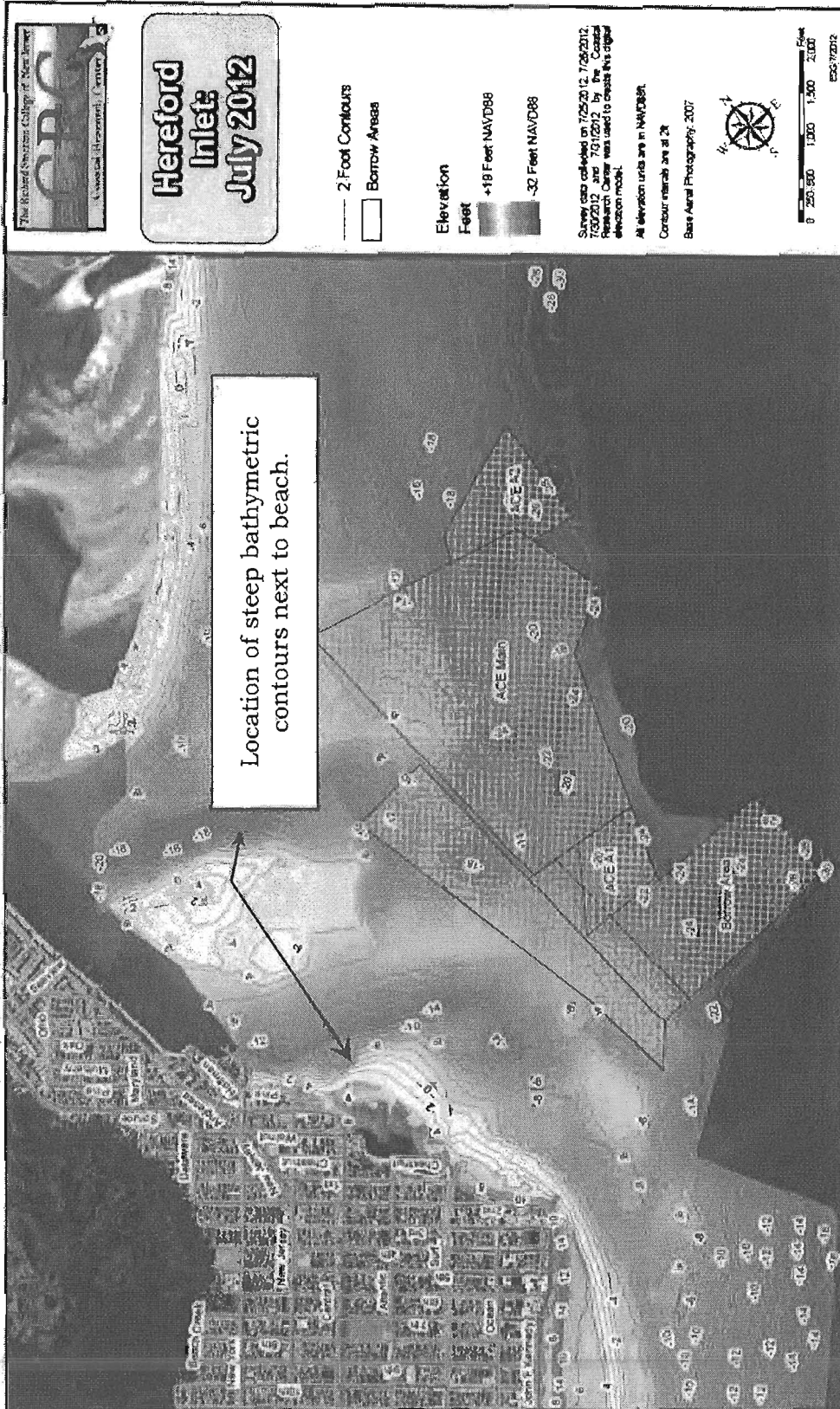


Figure A-3 Hereford Inlet Survey, July 2012 (Stockton Coastal Research Center, 2012a).

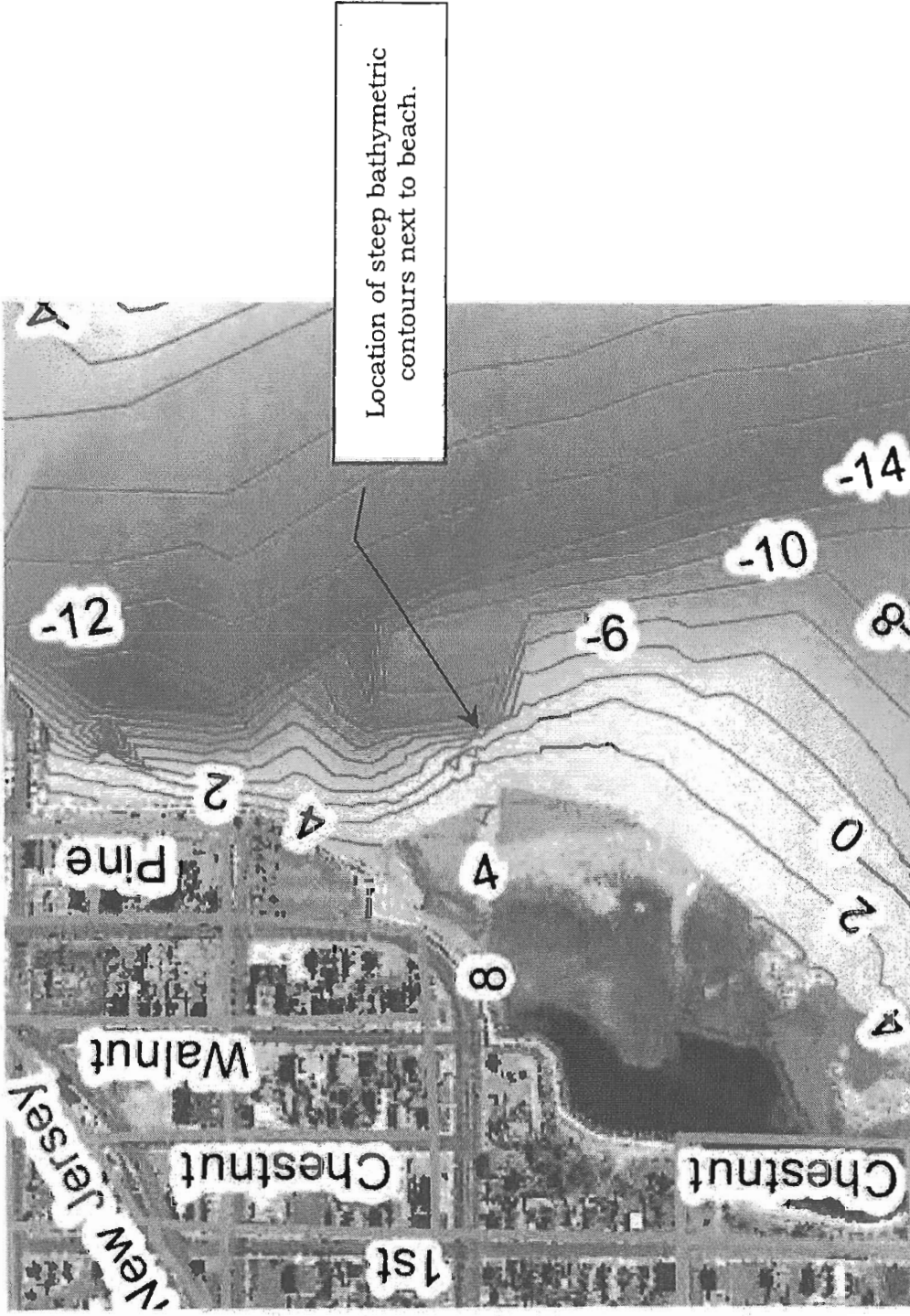


Figure A-4 Detail of July 2012 Stockton Coastal Research Center Survey (Stockton Coastal Research Center, 2012a).

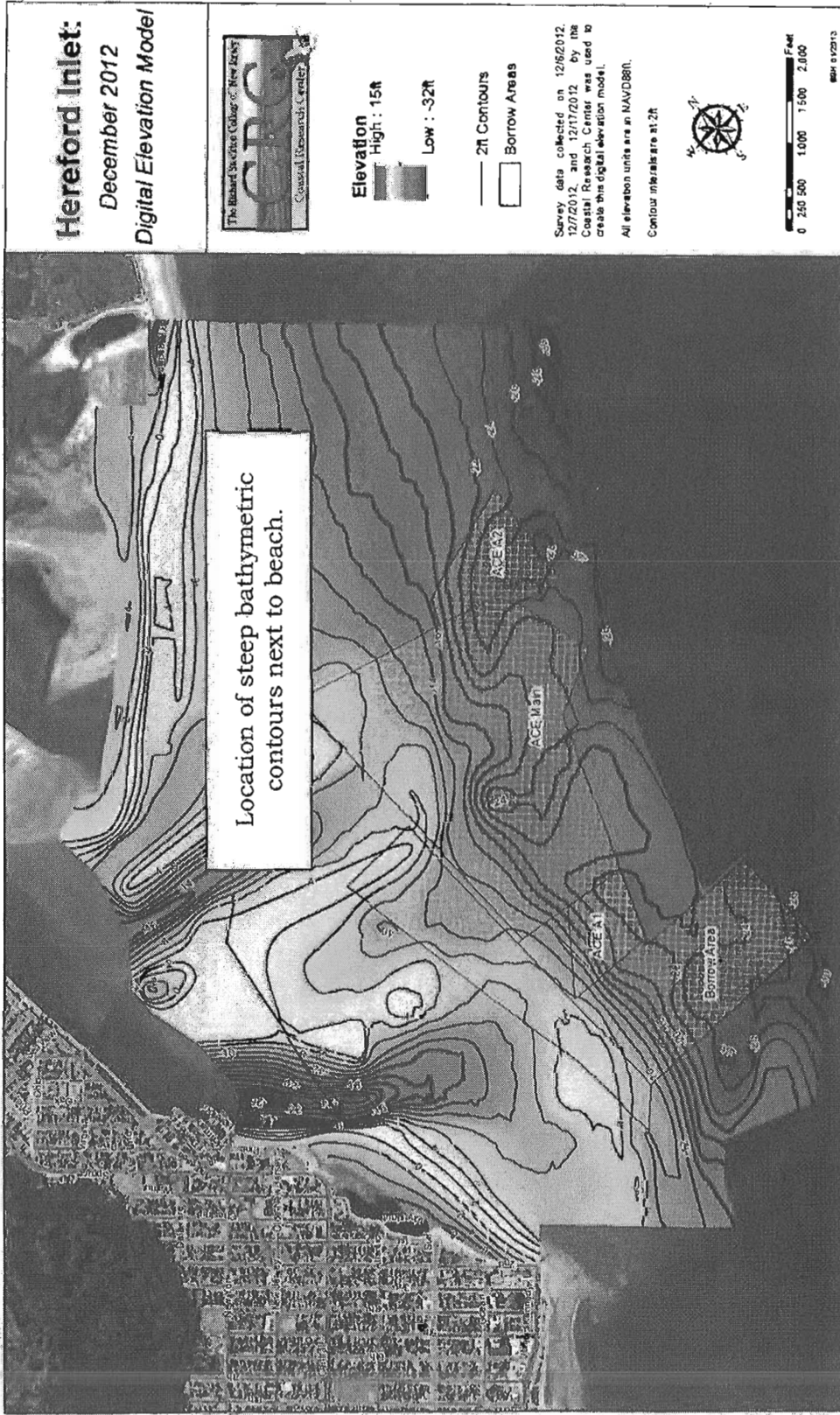


Figure A-5 Hereford Inlet Survey, December 2012 (Stockton Coastal Research Center, 2012b).

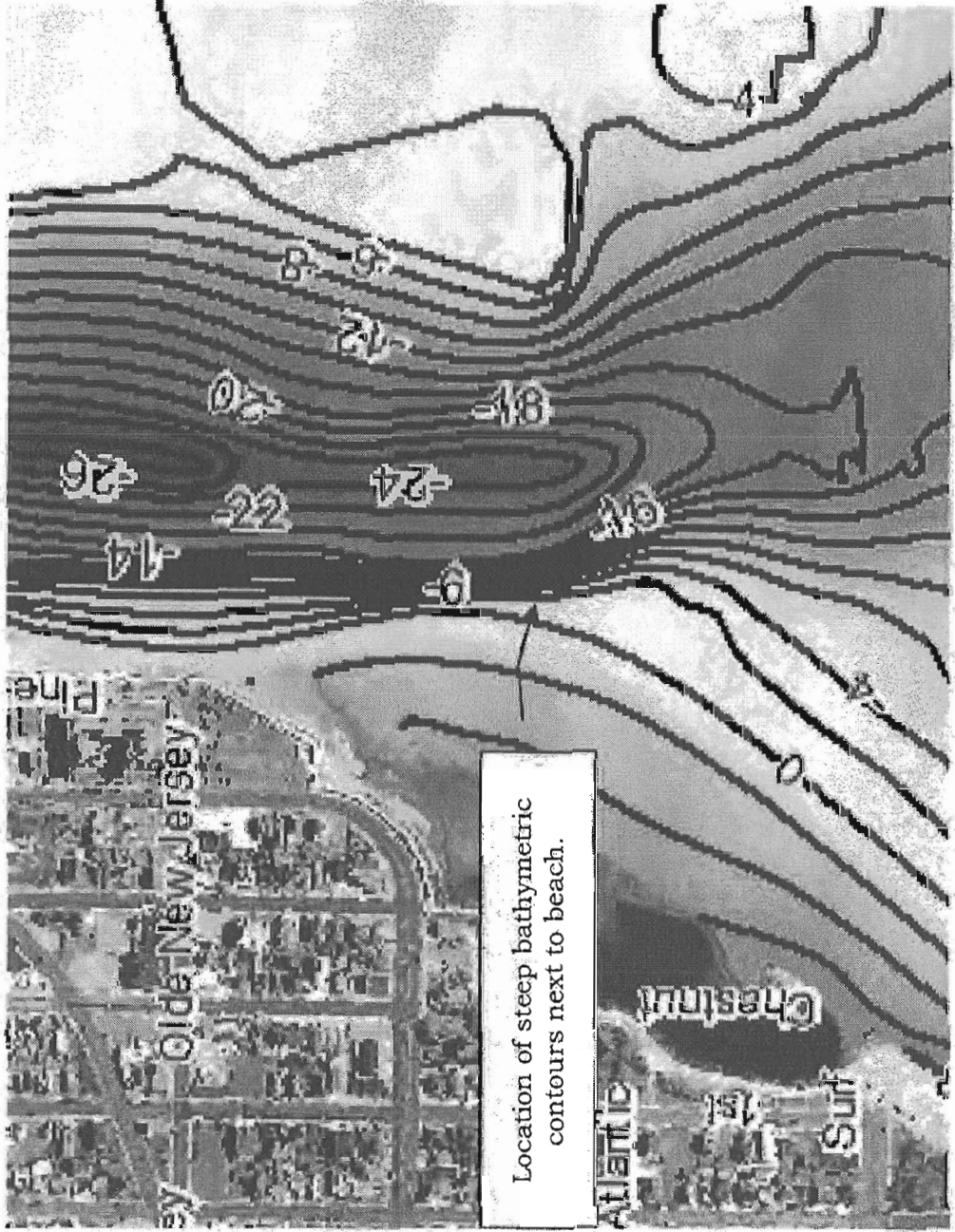


Figure A-6 Detail of December 2012 Stockton Coastal Research Center Survey (Stockton Coastal Research Center, 2012b)

APPENDIX B

U.S. Army Corps of Engineers Surveys and Cross-Sections.



Figure B-1 Corps of Engineers' Survey, August 2010.

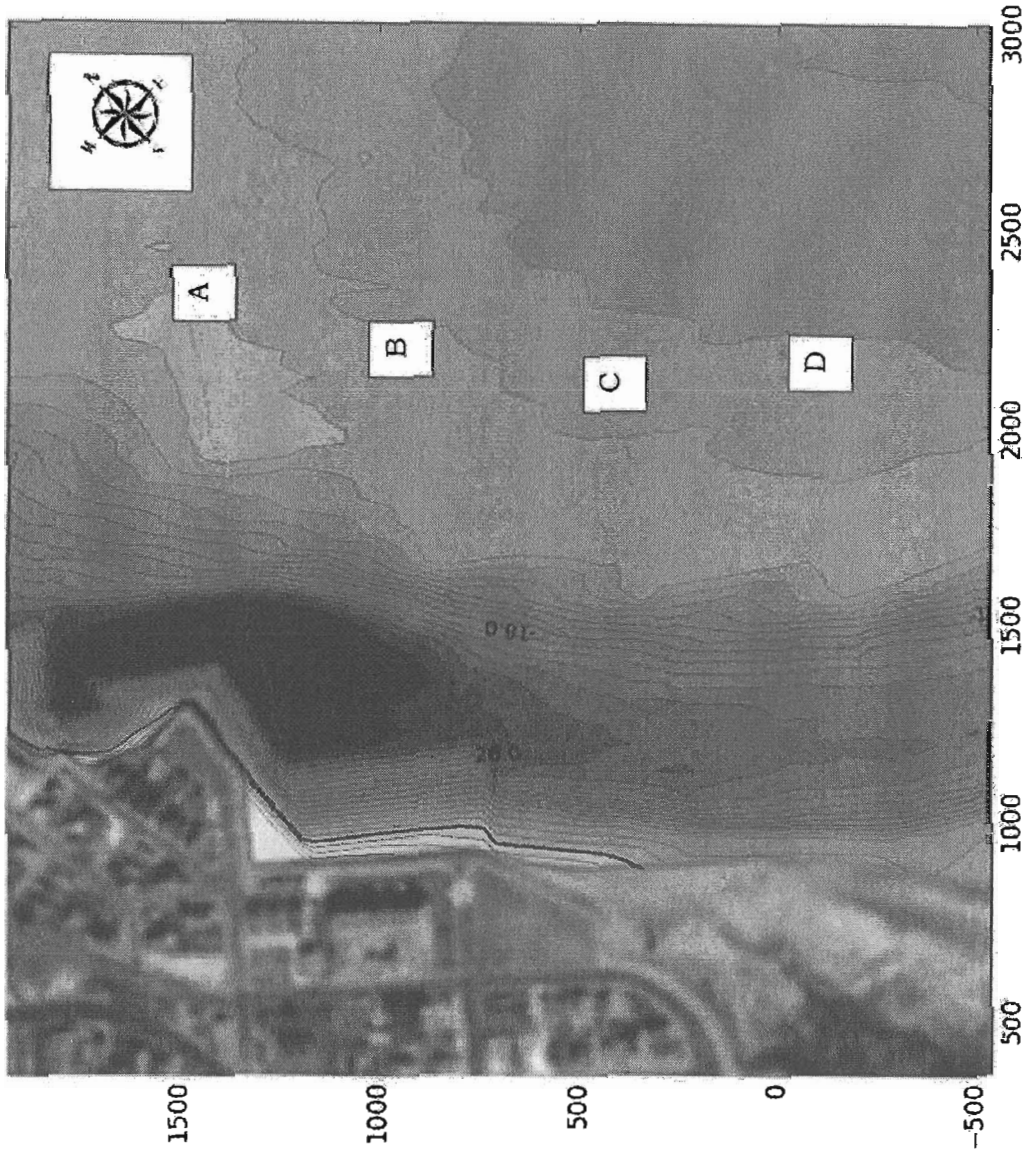


Figure B-2 Detail of Corps of Engineers' Survey, August 2010.

CHANNEL CROSS-SECTIONS - CORPS OF ENGINEERS 2010 SURVEY

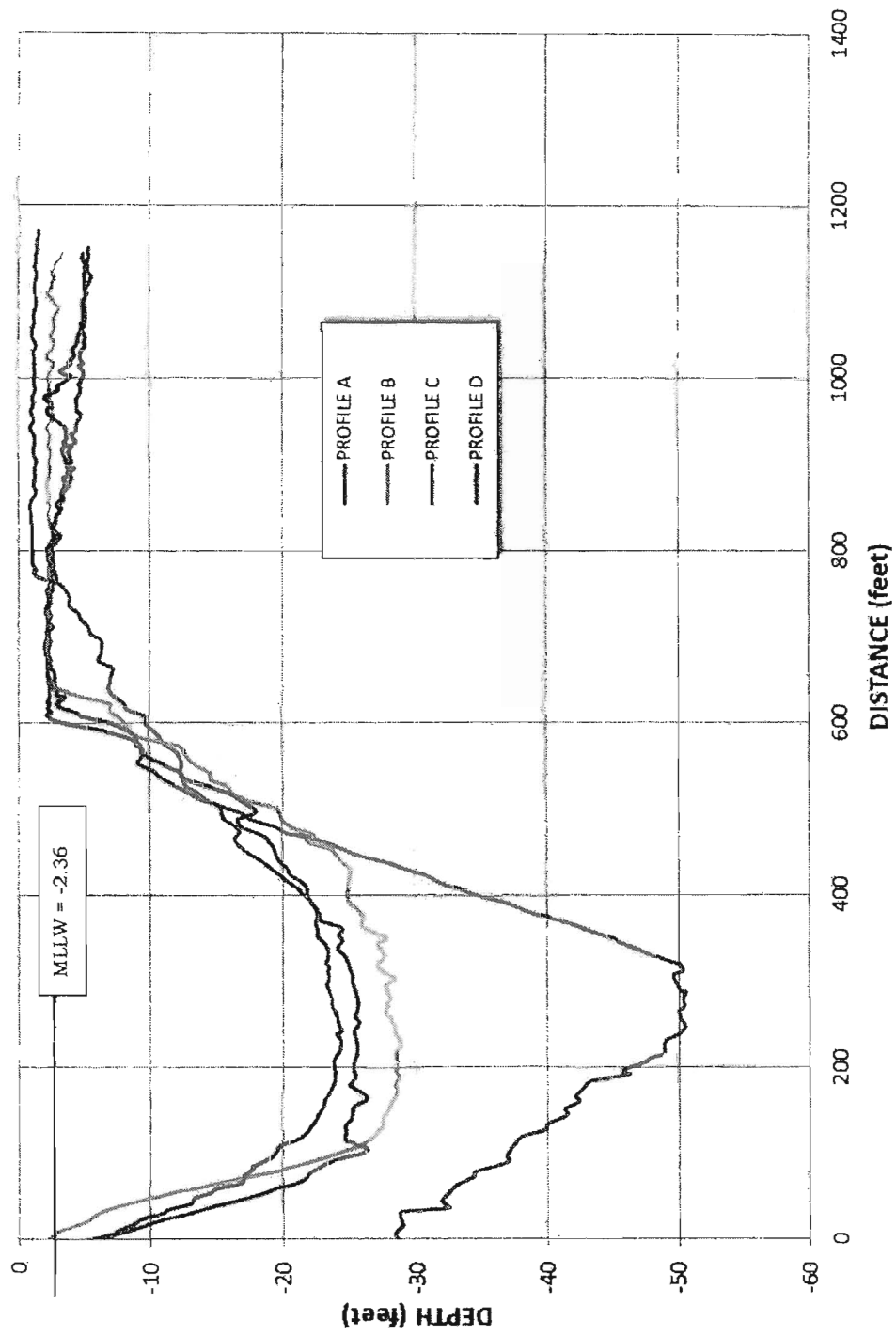


Figure B-3 Corps of Engineers' Profiles, 2010 Survey.

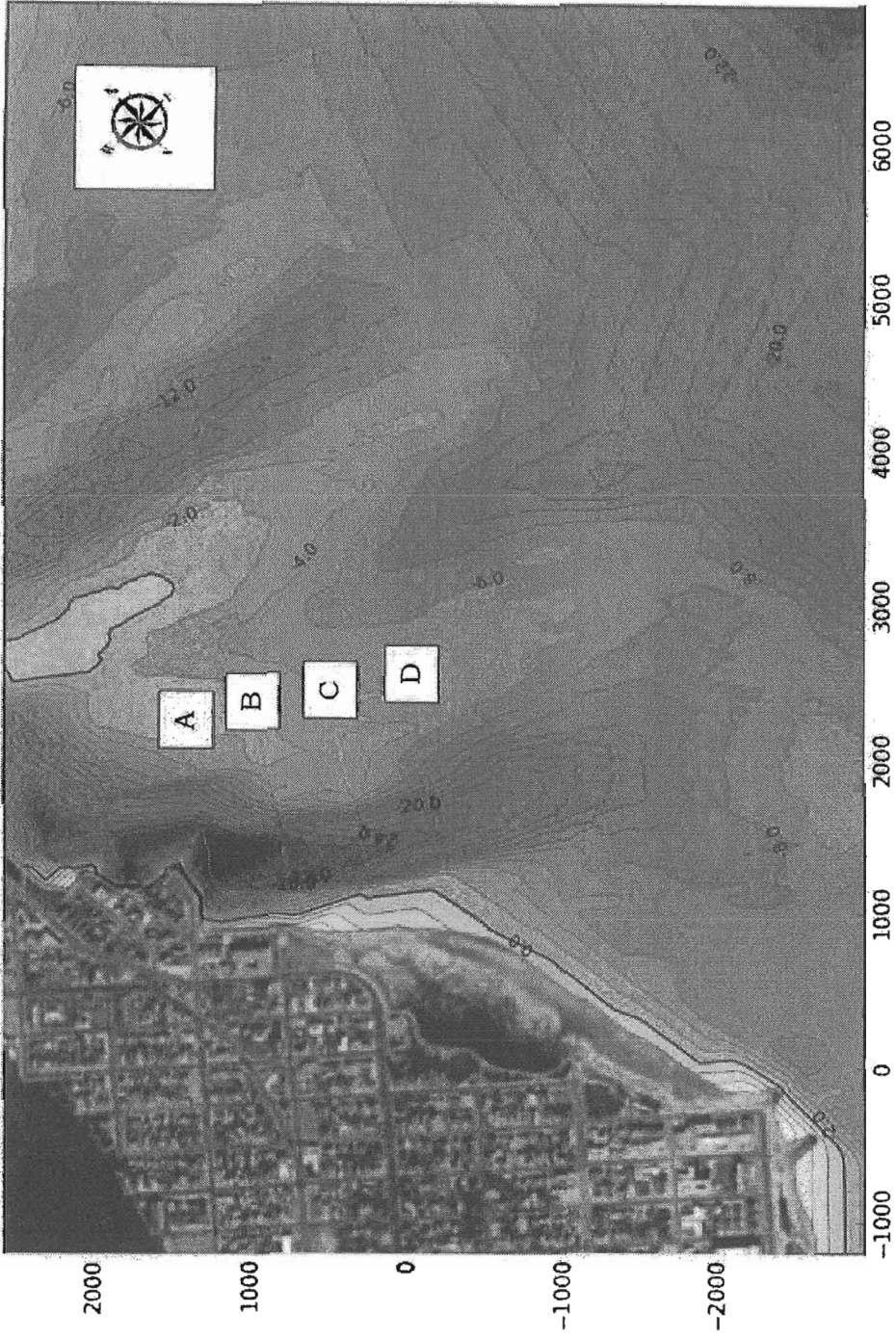


Figure B-4 Corps of Engineers' Survey, December 2012.

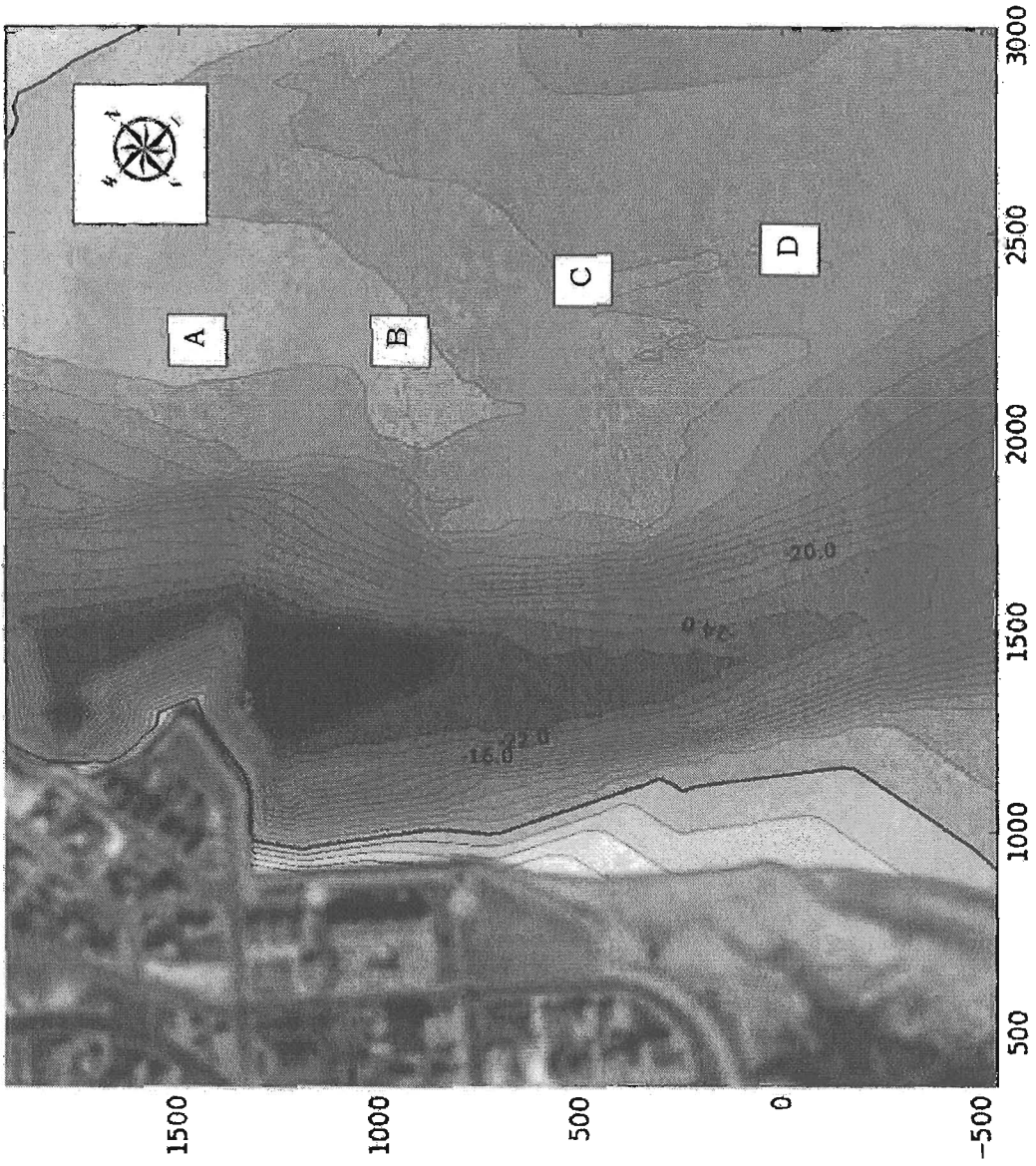


Figure B-5 Detail of Corps of Engineers' Survey, December 2012.

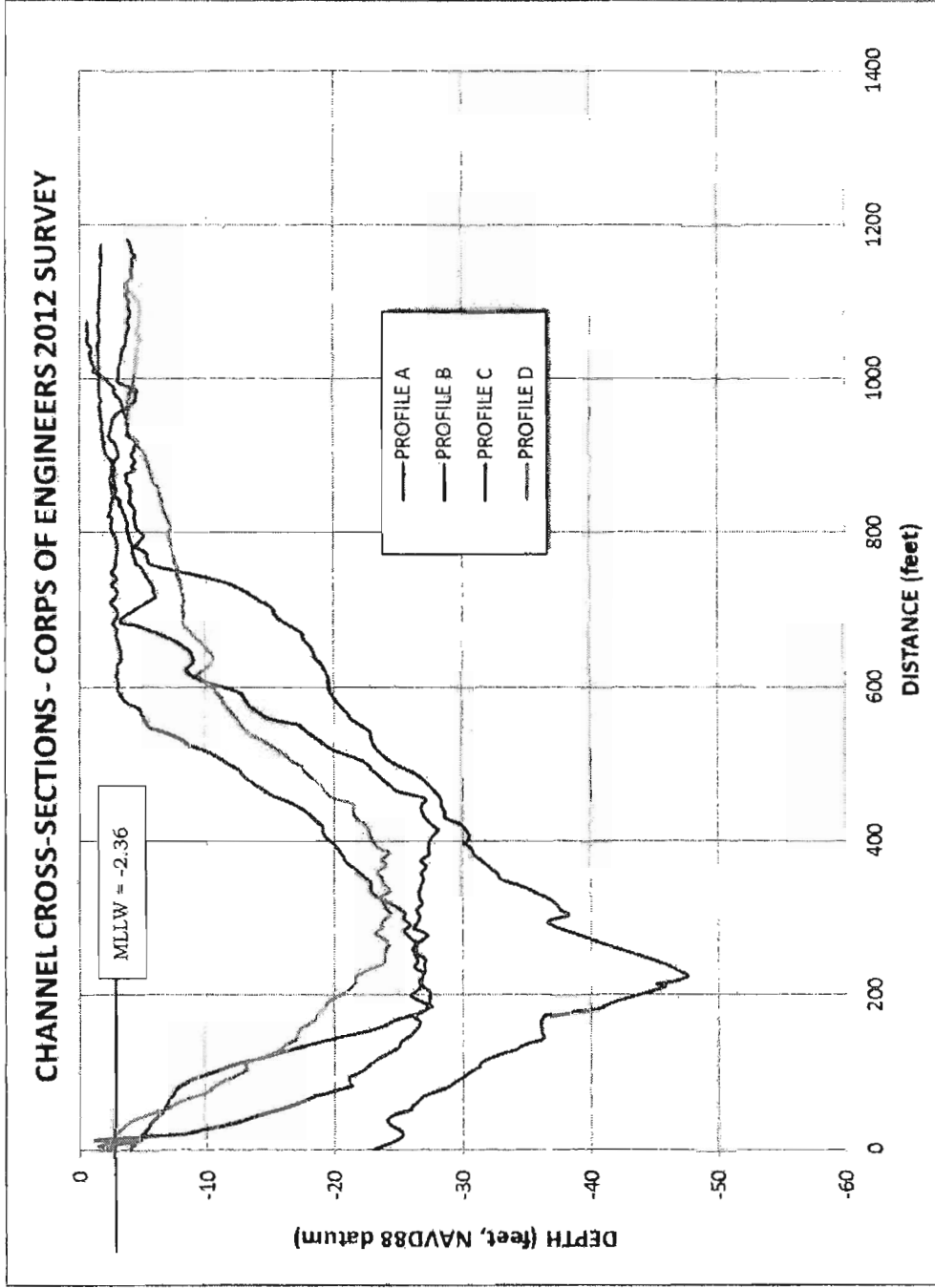


Figure B-6 Corps of Engineers' Profiles, 2012 Survey.

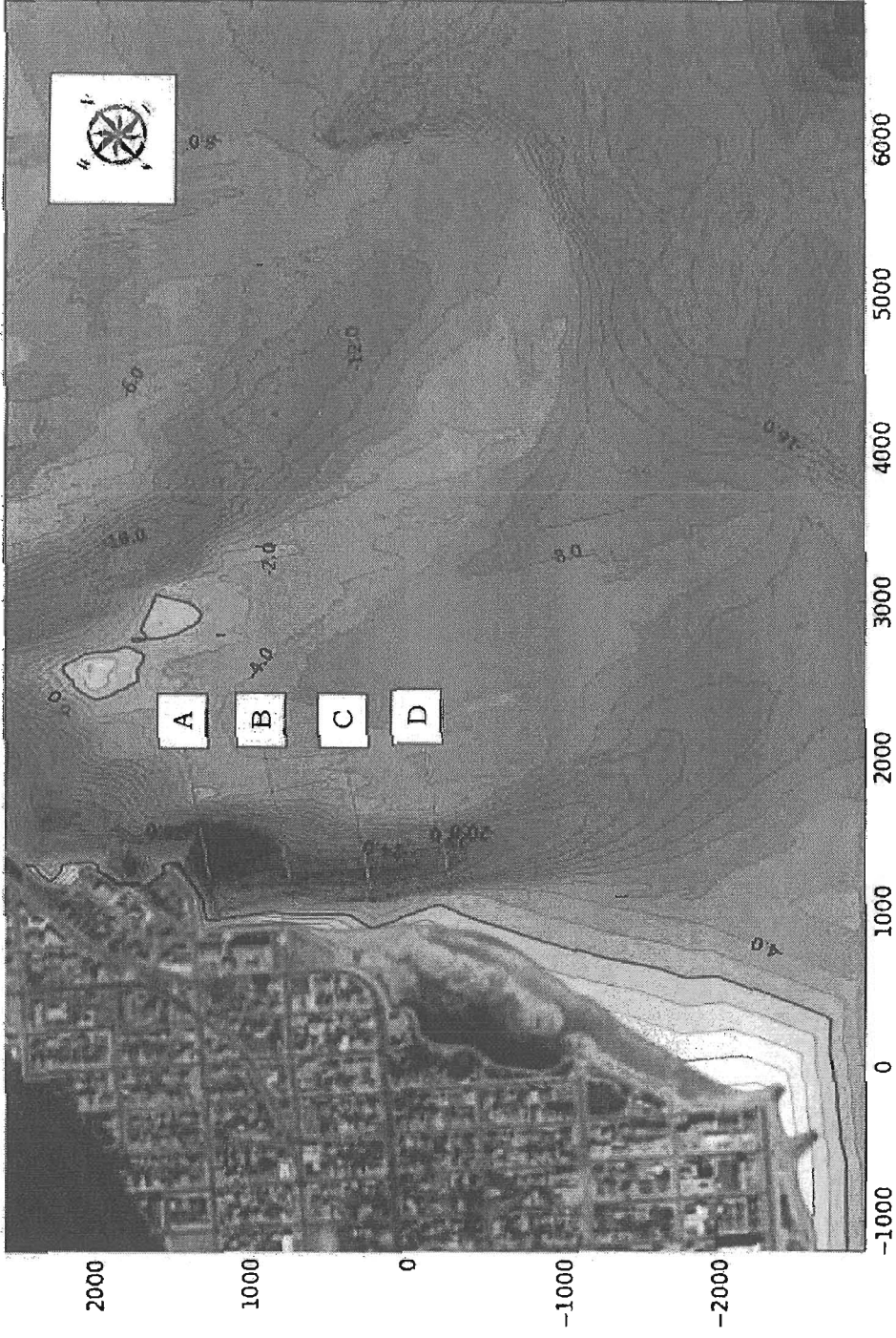


Figure B-7 Corps of Engineers' Survey, August 2014.

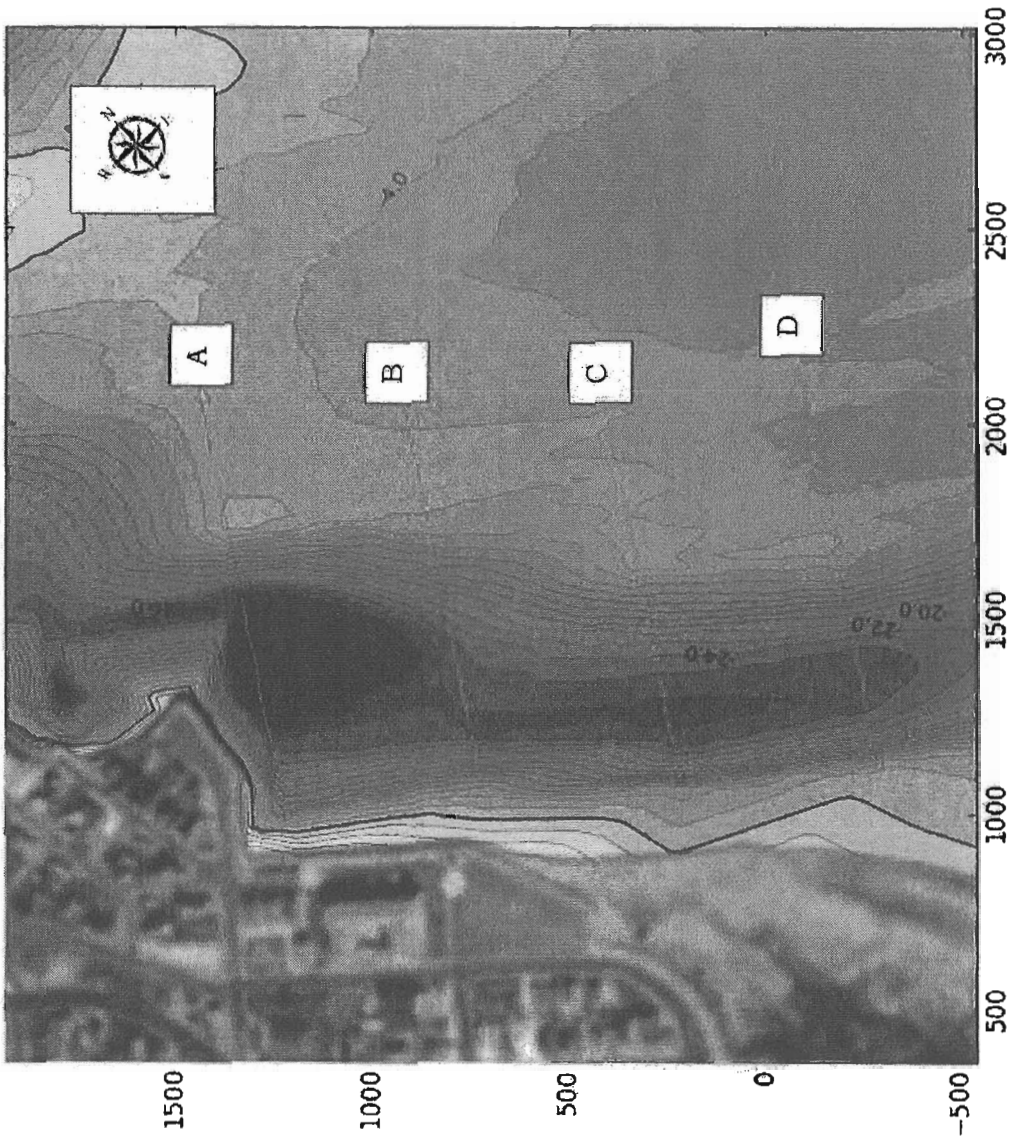


Figure B-8 Detail of Corps of Engineers' Survey, August 2014.

CHANNEL CROSS-SECTIONS - CORPS OF ENGINEERS 2014 SURVEY

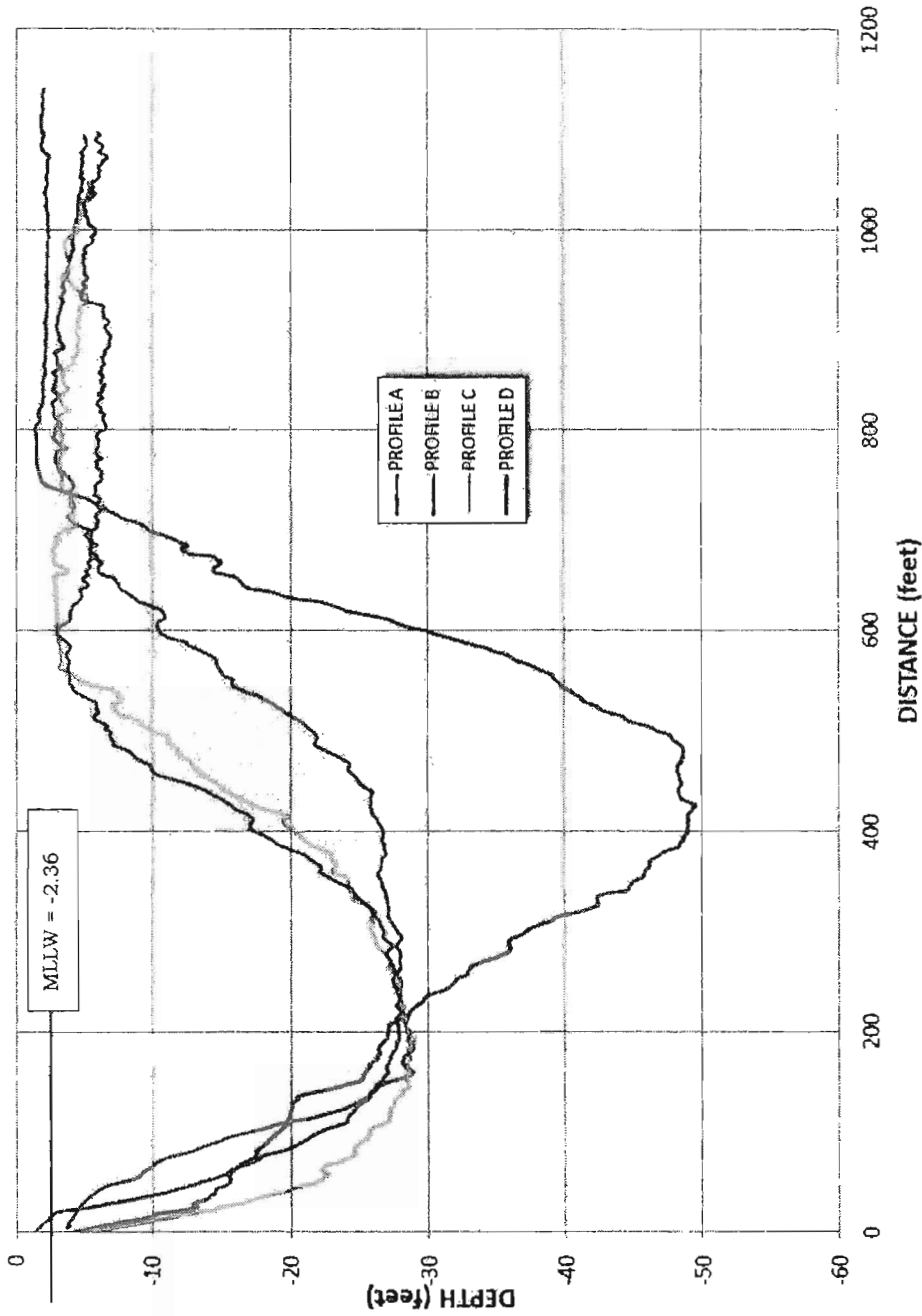


Figure B-9 Corps of Engineers' Profiles, 2014 Survey.

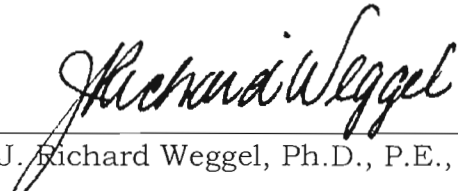
**ADDENDUM TO:
CONDITIONS IN HEREFORD INLET, NORTH WILDWOOD, NJ, LEADING TO
THE DROWNING DEATH OF MR. BRAD SMITH, 27 JULY 2012**

Prepared for
D'Amato Law Firm
2900 Fire Road, Suite 200
Egg Harbor Township, New Jersey, 08234
(Dated 19 April 2016)

18 July 2016

Based on my findings in the above referenced report to which this is an addendum, I most strongly recommend that the unprotected Inlet Beach at Hereford Inlet, North Wildwood, NJ, be closed. At the very least, beach users must be kept from getting within 10 feet of the inlet shoreline. The subject beach is that northeast of 2nd Avenue within the confines of the Hereford Inlet. My findings indicate that the inlet beach is occasionally undermined by ebbing tidal currents to produce an unstable slope which can collapse and cause pedestrians walking in shallow water to be swept into the inlet. I believe these conditions led to the drowning death of Mr. Brad Smith on 27 July 2012. These conditions are apparent on bathymetric surveys that show very steep underwater slopes close to the shoreline. Steep underwater slopes can be seen on six bathymetric surveys presented in the above referenced report. Three of the surveys were conducted by the Stockton Coastal Research Center in March 2011, July 2012 and December 2012. Three of the surveys were conducted by the U.S. Army Corps of Engineers in August 2010, December 2012 and August 2014. The fact that steep slopes appear on all six surveys indicates that the conditions are persistent. The dangerous slope conditions are below the water line and are not visible to pedestrians walking on the beach. Furthermore, they are not generally predictable although they probably occur most frequently during ebb current flows in the inlet.

I personally would not walk near the water line on the beach and I advise my friends and loved-ones to stay away from this area. Furthermore, I am bound by the Code of Ethics of the American Society of Civil Engineers to hold paramount the safety, health and welfare of the public. I believe that the cited inlet conditions are a threat to public safety.



J. Richard Weggel, Ph.D., P.E., D.CE

RESUME

JOHN RICHARD WEGGEL, Ph.D., P.E., D.CE

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9 January 2014

WEGGEL, John Richard

**Samuel S. Baxter Professor Emeritus
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Philadelphia, Pennsylvania 19104**

J. Richard Weggel was born in Philadelphia, Pennsylvania. He attended the Philadelphia Public Schools, graduating from Frankford High School in June 1959. In June 1964, he graduated from the Drexel Institute of Technology with a Bachelor of Science degree in civil engineering. While a student at Drexel, he conducted research sponsored by the National Science Foundation on epoxy resins for structural connections and taught an undergraduate laboratory course in strength of materials. Between June 1964 and September 1964, he taught static mechanics at Drexel. In September 1964, he enrolled as a graduate student in civil engineering (hydraulics) at the University of Illinois at Urbana-Champaign. While a research assistant at Illinois, he conducted research on long wave propagation in open channels, the effect of surface tension on the results of hydraulic model studies and served as Technical Assistant to the Director of the Illinois Water Resources Center. He received a Master of Science degree in September 1966; in 1968, he was awarded the Boris A. Bakhmeteff Research Fellowship in the Mechanics of Fluids to conduct his dissertation research on the impact pressures of breaking water waves. After obtaining a Doctor of Philosophy degree in civil engineering (hydraulics) in October, 1968, he remained at Illinois as an Assistant Professor of Civil Engineering teaching undergraduate courses in hydraulics and hydrology, and graduate courses in hydrology, ground water hydraulics, water resources engineering and ocean engineering. During the summer of 1969, he was a Research Assistant Professor of Soil Physics in Agronomy conducting research on the uptake of water by plant root systems. During the summer of 1970 he was a hydraulic engineer at the Coastal Engineering Research Center primarily involved in developing design criteria for coastal structures. In February 1971, he joined the permanent staff of the Coastal Engineering Research Center as a hydraulic engineer in the Design Branch preparing the internationally recognized "Shore Protection Manual." In March, 1973 he was promoted to Special Assistant to the Commander and Director, CERC, in which capacity he served as a consultant to various Corps of Engineers District and Division offices on complex coastal engineering problems. He served as a member of the Steering Committee of the North Atlantic Division's Deep Port Study Group and as the US Representative to the Second Intentional Waves Commission of the Permanent International Association of Navigation

Congresses (PIANC). In January, 1977, he became Technical Assistant to the Chief, Engineering Development Division, CERC, and developed a research program to investigate the functional performance of weir-jetty sand bypassing systems. Other research included development of a method for generating finite amplitude, shallow water waves that propagate without change in form in a laboratory wave tank.

In July, 1977, he became Chief, Evaluation Branch, Engineering Development Division, CERC, responsible for the \$600,000 research program of that Branch. Research areas included: weir-jetty research; field investigations of an experimental coastal groin at Point Mugu, California; a study of sand accumulation behind an offshore breakwater at Channel Islands Harbor, California; mathematical simulation of shoreline changes induced by man-made structures; evaluation of the functional and structural performance of coastal works; littoral environment data collection and analysis techniques; and the monitoring of existing coastal projects to determine their performance characteristics. He continued his service as consultant to various Corps of Engineer Districts and Divisions on coastal engineering problems.

During his tenure at the Coastal Engineering Research Center, he also held the rank of Professorial Lecturer at the George Washington University teaching courses in coastal and harbor engineering, sediment transport, coastal processes, and coastal structures.

In his present position as Professor of Civil Engineering in the Department of Civil and Architectural Engineering at Drexel University, Dr. Weggel teaches and conducts research in the areas of hydraulics, hydrology, water resources engineering and coastal and port engineering.

EDUCATION:

1. Bachelor of Science in Civil Engineering, June 1964, Drexel Institute of Technology.
2. Master of Science (civil engineering, hydraulics), June 1966, University of Illinois at Urbana-Champaign.
3. Doctor of Philosophy (civil engineering, hydraulics, water resources), October 1968, University of Illinois at Urbana-Champaign.

LICENSES & OTHER TRAINING:

1. Registered Professional Engineer

Illinois (by examination, inactive)
New Jersey
Pennsylvania

2. Academy of Coastal, Ocean, Port and Navigation Engineers (ACOPNE),
Diplomate, Coastal Engineering
3. "Tidal Inlet Hydraulics", Short Course, US Army Coastal Engineering
Research Center, May 10-20, 1971, Washington, DC
4. "Streamfunction Wave Theory", Short Course, University of Florida,
June 18-July 2, 1971, Gainesville, Florida.
5. "Hurricane Storm Surge Prediction and Frequency Analysis", Short
Course, US Army Coastal Engineering Research Center, June 25-30,
1972, Washington, DC
6. "Planning for Offshore Ports", Marine Technology Society, September
10-14, 1973, Washington, DC
7. "Executive Leadership Seminar", US Civil Service Commission, May
11-14, 1975, Fredericksburg, Virginia
8. "Managing Management Time", US Department of Agriculture
Graduate School, September 11-12, 1975, Washington, DC
9. "Management of Research and Development", The George Washington
University, Spring, 1976.
10. "Project Health, Practical Guide to Executive Fitness and Well Being",
Civilian Personnel Office, November 1977, Fort Belvoir, Virginia.
11. "Supervisor Development, Phase I", Civilian Personnel Office,
September, 1977, Fort Belvoir, Virginia.
12. "Supervisor Development, Phase II", Civilian Personnel Office, June,
1978, Fort Belvoir, Virginia.
13. "Theory Z (Management Science)", Institute for Professional
Development, December 10-13, 1978, Arlington, Virginia.
14. "HP 9845 Operation and Programming", Hewlett-Packard Computer
Systems, January, 1981, Rockville, Maryland.

15. "Effective Engineering Management"; University of California at Los Angeles, June 22-27, 1981, Washington, DC

16. "Numerical Calculation of Fluid Flow and Heat Transfer", Drexel University, Continuing Professional Education, February - April, 1984, Philadelphia, PA.

17. "Introduction to Geophysics," G228, Department of Civil & Architectural Engineering, Drexel University - spring 1988

18. "Finite Element Method in Groundwater Flow Modeling" Drexel University – spring 1991

HONORS & AWARDS:

1. William Penn Troth Award, Drexel Institute of Technology, 1964

2. Class of 1916 Award, Drexel Institute of Technology, 1964

3. Institute Day Award, Drexel Institute of Technology, 1963

4. Boris A. Bakhmeteff Fellowship in the Mechanics of Fluids, Humanities Fund, Inc., 1967

5. Outstanding Performance Rating, US Army Corps of Engineers, 1973, 1974, 1975, 1976, 1981, 1982

6. Commanders Award for Engineering Excellence ("Engineer of the Year Award"), US Army Coastal Engineering Research Center, 1982

7. American Society of Civil Engineers, Moffatt & Nichol Harbor and Coastal Engineering Award, 1993

8. Robert G. Quinn Medal for Outstanding Leadership, Drexel University, 20 February 2002

9. Lifetime Achievement Award, College of Engineering, Drexel University, 22 February 2008

10. Induction into Drexel University's College of Engineering Alumni Circle of Distinction, 24 February 2012.

11. Drexel University, Department of Civil, Architectural & Environmental Engineering's Alumni Lecture, May 2012.

12. The Order of the Engineer (inducted 2003)

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS & HONORARY SOCIETIES:

1. American Society of Civil Engineers, Fellow, Life Member

* Research Committee, Waterway, Port, Coastal & Ocean Division, ASCE.

- Member, 1975-1978
- Chairman, 1978

* Executive Committee, Waterway, Port, Coastal & Ocean Division, ASCE.

- Member, 1979-1983
- Chairman, 1981-82

* Management Group D,

- Member, 1983-1988
- Chairman, 1986-1987

* Chairman, Organizing Committee, Coastal Structures '79, Specialty Conference.

* Program Chairman, Coastal Structures '83, Specialty Conference.

* Co-chairman, Organizing Committee, Coastal Engineering Practice '97 Specialty Conference

* National Offshore Policy Committee

- Member, 1981-1988

* Committee on TAC Interface with Sections and Branches

- Member, 1988-1992

* Rubble-Mound Structures Committee

- Member, 1990 - present

* Philadelphia Section, ASCE

- Member 1983-present
- Member, Board of Directors, 1984-1993
- Vice President, 1987-88
- President elect, 1988-89

- President, 1989-1990
 - * Water and Environmental Group, Philadelphia Section
 - Member, 1983-present
 - Chairman, 1984-85
 - * Member, Infrastructure Committee, Philadelphia Section, 1984.
2. American Geophysical Union, Member
 3. Permanent International Association of Navigation Congresses,
 - Member.
 - * Second International Waves Commission, PIANC, US Representative
 - * US Representative - Working Group on Sand Bypassing at Inlets on Sandy Coasts (1992 - 1995)
 4. American Shore and Beach Preservation Association, Member
 - * Past Member of Board of Directors, ASBPA
 5. Northeast Shore & Beach Preservation Association, Vice President
 - * Treasurer (2009-present)
 - * Co-chair, Technical Program Committee, Annual Meeting
 - * Program Chairman, Northeast Beaches Conference, 2008
 - * Program Chairman, Northeast Beaches Conference, 2010
 - * Program Chairman, Northeast Beaches Conference, 2013
 6. International Association for Hydraulic Research (IAHR)
 - * Faculty Advisor, Drexel University Student Chapter
 7. Accreditation Board for Engineering & Technology
 - * Accreditation visitor for civil engineering programs (1988 - 1998)
 8. Marine Board, National Research Council, Committee on Beach Nourishment and Protection (1992 - 1995)
 9. Educational Testing Service, Committee to Investigate the Development of a Graduate Record Examination in Engineering (1992 - 1994)
 10. Chi Epsilon
 - Faculty Advisor, Drexel University Chapter (2007-present)

11. Tau Beta Pi
12. Phi Kappa Phi
* Vice President, Drexel Chapter (1992 - 1997)
13. Sigma Xi
14. Abington Township Planning Commission
* Member (June 2013 – present)
- 15 Member, President John Fry's Visiting Board, Drexel University

EMPLOYMENT RECORD:

- * **Samuel S. Baxter Professor Emeritus**, Drexel University, September 2008 to present
- * **Samuel S. Baxter Professor of Civil Engineering**, Drexel University, June 1998 – September 2008
- * **Professor** – Department of Civil, Architectural & Environmental Engineering, Drexel University, 32nd & Chestnut Streets, Philadelphia, PA 19104 – September 1988 to September 2008
- * **Associate Dean for Undergraduate Affairs** – College of Engineering, Drexel University - August 2000 to December 2003
- * **Interim Head, Department of Civil, Architectural & Environmental Engineering**, Drexel University – October 2002 to October 2003
- * **Head, Department of Civil & Architectural Engineering** – July 1988 to July 1991
- * **Associate Professor** – Department of Civil Engineering, Drexel University, 32nd & Chestnut Streets, Philadelphia, PA 19104 – July 1983 to September 1988
- * **Chief, Coastal Structures and Evaluation Branch** - US Army Coastal Engineering Research Center - July 1977 to July 1983.

As Chief of the Coastal Structures and Evaluation Branch, managed the manpower and financial resources to conduct the research and technology transfer program of the branch. Research efforts included studies of weir jetty performance and design, numerical modeling of shore response to coastal structures, coastal data collection methods and interpretation, and evaluation of the performance of existing coastal projects to establish improved design techniques. In addition, the Corps' Monitoring Completed Coastal Projects (MCCP) Program was managed and carried out in the Evaluation Branch. During tenure as Branch Chief, the Evaluation Branch developed into one of the most productive groups in CERC. The branch produced more than 13 Technical Reports, Coastal Engineering Technical Aids, and other publications during 1981. Most reports prepared in the branch were aimed directly at assisting practicing coastal engineers perform their work. In addition, served as a high level consultant to Corps Districts and Divisions; the office of the Chief of Engineers (OCE), the Board of Engineers for Rivers and Harbors

(BERH), and other agencies on complex coastal engineering problems. Consulting efforts included project reviews for OCE and BERH; assistance to the Corps' Savannah District on the design of a weir groin; review of an appeal to the Federal Insurance Administration (FIA) by the State of Alabama; proposed boat basin modifications for the Coast Guard at their Shark River Station, New Jersey; consultation on an erosion problem for the Corps' Middle East Division at the King Abdulaziz Naval Base, Jubail, Saudi Arabia, and preparation of a sediment budget for the Oceanside, California area.

* **Professorial Lecturer** - Department of Civil, Mechanical and Environmental Engineering. The George Washington University - September 1974 to June 1983.

As an adjunct faculty member, taught graduate courses in coastal and harbor engineering, sediment transport, coastal structures, and coastal processes.

* **Technical Assistant to Chief, Engineering Development Division** - US Army Coastal Engineering Research Center - January 1977 to July 1977.

As Technical Assistant to the Chief of the Engineering Development Division, developed a research program for weir jetty research in the Division and initiated its execution; served as a consultant to Corps Districts and Divisions, Office of the Chief of Engineers, the Board of Engineers for Rivers and Harbors, and other agencies. Consulting efforts included work on determining the coastal processes at Ocean Beach, San Francisco, California for the National Park Service and evaluating the potential of using excavation material from the Upper Great Highway as beach nourishment.

* **Special Assistant to the Commander and Director** - US Army Coastal Engineering Research Center - March 1973 to January 1977.

As a staff member of CERC's Executive Office, reviewed reports submitted to CERC by OCE, BERH and Corps Districts and Divisions for technical adequacy and for compliance with Corps policies; served as a consultant to Corps Districts and Divisions including a study resulting in development of computer simulations of wave action on the Savannah River Tide Gates, served as the US Representative to the Second International Waves Commission of the Permanent International Association of Navigation Congresses (PIANC) and was a contributor to the final report of that Commission.

In addition to technical activities, provided staff support to the Commander and Director on the management of CERC including advising him on the Chief of Engineers' Coastal Engineering Research Board's (CERB) activities; arranged meetings, prepared the minutes of CERB meetings, and prepared staff studies for submission to the Director of Civil Works and the Chief of Engineers recommending membership of the CERB; insured that the CERB complied with the newly instituted Federal Advisory Committee Act's provisions; prepared the first 5 year plan for CERC under the newly established Research and Development Office. This plan resulted in restructuring CERC's research program into new technical categories; arranged and conducted the early meetings of the Chief of Engineers' Shoreline Erosion Advisory Panel (SEAP) initiating work under Section 54, the Shoreline Erosion Control Demonstration Act.

*** Hydraulic Engineer - US Army Coastal Engineering Research Center** - February 1971 to March 1973.

As an engineer in the Design Branch, reviewed recent research developments to determine their applicability to the solution of Corps of Engineers problems related to coastal engineering design; performed work leading to the development of design criteria for coastal and marine structures to be included in the Shore Protection Manual (SPM) and served as a technical editor for this internationally recognized coastal design manual; developed design criteria for determining the maximum breaking wave that a given coastal structure can experience. These criteria have been adopted by the Nuclear Regulatory Commission for the design of coastal nuclear power plant facilities; reviewed research proposals for possible funding by the Corps and served as a consultant to Corps Districts and Divisions on coastal engineering problems and as a member of the Steering Committee of the Corps' North Atlantic Division Deep Draft Port Study.

*** Assistant Professor - Department of Civil Engineering, University of Illinois** - September 1968 to February 1971.

Taught undergraduate courses in hydrology and hydraulic engineering, and graduate courses in hydrology, groundwater hydraulics, water waves and ocean engineering; research activities included studies of wave forces on coastal structures, hydraulic modeling techniques and water waves. Other activities included various faculty committees.

*** Assistant Professor of Soil Physics in Agronomy - Department of Agronomy, University of Illinois - June 1969 to September 1969.**

Conducted research on the uptake of water by plant root systems including the development of gamma radiation techniques for measuring soil water content.

*** Research Assistant - Department of Civil Engineering, University of Illinois - September 1964 to September 1968.**

Conducted research on computer solutions of the one dimensional equations for flow in river channels (long waves in shallow water); effect of viscosity and surface tension on the results of hydraulic model studies, and the study of wave impact pressures on coastal structures.

*** Instructor - Department of Civil Engineering, Drexel Institute of Technology - June 1964 to September 1964.**

Taught undergraduate static mechanics and strength of materials laboratory courses; conducted research on the use of epoxy resin adhesives for structural connections.

COURSES TAUGHT:

Undergraduate:

E224 Nearshore Oceanography & Coastal Engineering
E254 Introduction to Hydrology
E255 Groundwater Hydrology
E256 Water Resources Engineering
CAEE201 Introduction to Infrastructure Engineering
CAEE210 Engineering Measurements I
CIVE320 Introduction to Fluid Flow
CIVE330 Hydraulics I
CIVE430 Introduction to Hydrology
CIVE431 Groundwater Hydrology
ENGR100 University Seminar (Freshmen)
UNIV101 The Drexel Experience (Freshmen)
UNIV241 Great Works Symposium – The Mississippi River
E⁴ (Enhanced Engineering Education Experience Program)
Mathematical & Scientific Fundamentals of
Engineering I (Statics & Dynamics)
ENGR131 Freshman Design
CIVE240 Engineering Economic Analysis/Decision Making

Graduate:

CIVE561 Introduction to Hydrology

CIVE660 Hydrology - Streamflow
CIVE661 Hydrology - Groundwater
CIVE560 Introduction to Coastal & Port Engineering
CIVE790 Coastal Processes & Shoreline Erosion
CIVE790 Coastal & Port Structures
CIVE664 Open Channel Flow
CIVE662 Hydromechanics I
CIVE663 Hydromechanics II

STUDENTS SUPERVISED:

Doctoral Students:

Scott L. Douglass, Ph.D., "The Influence of Wind on Nearshore Breaking Waves," March 1989
Rifat N. Rustom, Ph.D., "Evaluation of Geosynthetic Erosion Control Systems on Steep Slopes," June 1993
Karen Ann Riley, Ph.D. – "A Model for Nitrate Mass in Runoff during Single Storm Events," June 2002
Muhammad Khan, Ph.D. – "Scaling Relations from Scale Model Experiments on Equilibrium Accretionary Beach Profiles," December 2002
Mehmet Hınıs, Ph.D – "Cnoidal and Sinusoidal Wave Reflection from a Laboratory Sand Beach," March 2003

Masters Students

Sherrerd L. Steele, M.S., "A Sediment Budget for Ocean City, New Jersey"
Edward Doheny, M.S., "Application to Townsend's Inlet of a Numerical Model Using the Characteristic Equations of Open Channel Flow"
Rhomios Ram, M.S., "Evaluation of a Model Breakwater's Stability Using Acoustic Emissions"
Juan Carlos Escajadillo, "The Performance of Three Types of Groins in New Jersey"
Robert Webb, "New Jersey's Coastal Groins - Dimensional Considerations"
Matthew Moreale (University of Pennsylvania), "A Sediment Budget Analysis for the Beachfront at Ocean City, New Jersey"
Mohamed Dabees, "Shoreline Change Modeling and Application to Sea Isle City, New Jersey"
Maria Laura Beninati, "Modeling Chlorine Residuals in Water Distribution Systems"
Mehmet Hınıs, "Procedure for Calculating Beach Dune Growth Rates"

Gwyneth Krimmel, "Laboratory Experiments on First Flush Pollution
Runoff"

Brian Marengo – "Numerical modeling of Schuylkill River near its
Confluence with the Wissahickon Creek"

Jacob Dortch – "Hanging Bag Test for Geotextile Bags"

PUBLICATIONS:

1. Weggel, J. Richard, "Epoxy Resins for Structural Connections", *Drexel Technical Journal*, Drexel Institute of Technology, October, 1964.
2. Maxwell, W.H.C. & J. R. Weggel, "Surface Tension in Froude Models", *Journal of the Hydraulics Division*, ASCE, #6482, March, 1969.
3. Weggel, J. Richard, "The Impact Pressures of Breaking Water Waves", Ph.D. Dissertation, Department of Civil Engineering, University of Illinois at Urbana-Champaign, October, 1968.
4. Weggel, J. Richard & W.H.C. Maxwell, "A Numerical Model for Wave Pressure Distributions", *Journal of the Waterways, Harbors & Coastal Engineering Division*, ASCE, #7467, August, 1970.
5. Weggel, J. Richard & W.H.C. Maxwell, "Experimental Study of Wave Impact Pressures", Proceedings of the Second Annual Offshore Technology Conference, OTC 1244, April 23-24, 1970, Houston, Texas.
6. Weggel, J. Richard, Discussion of "Shock Pressure on Coastal Structures", by Adel M. Kamel, *Journal of the Waterways, Harbors & Coastal Engineering Division*, ASCE, WW3, pp. 584-588.
7. Teleki, P.G. & J.R. Weggel, Discussion of "Skewness as an Environmental Indicator in the Solani River System, Roorkee, India", by A.K. Awasthi, *Sedimentary Geology*.
8. Weggel, J. Richard, "Maximum Breaker Height", *Journal of the Waterways, Harbors & Coastal Engineering Division*, ASCE, #9384, November, 1972.
9. Weggel, J. Richard, "Maximum Breaker Height for Design", Proceedings, 13th International Conference on Coastal Engineering, Vancouver, B.C., 1972.
10. Weggel, J. Richard, "An Introduction to Oceanic Water Motions and their Relation to Sediment Transport", in *Processes and Patterns of Sediment Dispersal on the Continental Shelf*, Dowd, Hutchinson and Ross, Publishers, Stroudsburg, PA.
11. Weggel, J. Richard, "A Wave Overtopping Equation", Proceedings 15th International Conference on Coastal Engineering, Honolulu, Hawaii, July, 1976.

12. Weggel, J.R., Roberts, & J. Hagar, "Wave Action on the Savannah Tide Gates", Proceedings, Coastal Structures '79 Conference, Alexandria, VA. March 14-16, 1979.
13. Weggel, J. Richard, "A Method for Estimating Long Term Erosion Rates from a Long Term Rise in Water Level", CETA 79-2, Coastal Engineering Research Center, Fort Belvoir, VA., 1979.
14. Weggel, J.R. & R.M. Sorensen, "Surging in the Shark River Boat Basin", Proceedings, Ports '80 Conference, Norfolk, VA. May 19-20, 1980.
15. Schneider, C. & J.R. Weggel, "Visually Observed Wave Data at Point, Mugu California", Proceedings, 17th International Conference on Coastal Engineering, Sydney, Australia, 1980.
16. Weggel, J. Richard, "Wave Loading on Vertical Sheet-pile Groins and Jetties", CETA 81-1, Coastal Engineering Research Center, Fort Belvoir, VA. 1981.
17. Weggel, J. Richard, "Weir Sand Bypassing Systems", Special Report, SR-8, Coastal Engineering Research Center, Fort Belvoir, VA. 1981.
18. Weggel, J. Richard, "Some Observations on the Economics of Over-designing Rubble-Mound Structures with Concrete Armor", CETA 81-7, Coastal Engineering Research Center, Fort Belvoir, VA. 1981.
19. Watts, G.M, C.H. Fisher, N.E. Parker & J.R. Weggel (1981) "Coastal Erosion Caused by Harbor Works and Corrective Measures," Section II, Subject 5, XXVth International Congress, PIANC, Edinburgh, Scotland, 1981.
20. Walton, T.L., W. Birkemeier, & J.R. Weggel, "Hand-held Calculator Algorithms for Coastal Engineering", CETA 82-1, Coastal Engineering Research Center, Fort Belvoir, VA. 1982.
21. Walton, T.L., & J.R. Weggel, "Stability of Rubble-Mound Breakwaters", *Journal of the Waterway, Port, Coastal & Ocean Division*, ASCE, WW3, August, 1981, pp. 195.
22. Weggel, J.R. & T.L. Walton, "Coastal Structures as Sediment Traps", unpublished CERC report, Coastal Engineering Research Center, Fort Belvoir, VA, 1981.

23. Schneider, C. & J.R. Weggel, "Littoral Environment Observation (LEO) Data Summaries, Northern California, 1968-1978," Miscellaneous Paper 82-6, Coastal Engineering Research Center, Fort Belvoir, VA, August 1982.
24. Weggel, J.R. & P. Vitale, "Sand Transport Over Weir Jetties and Low Groins", in *Physical Modeling in Coastal Engineering*, R.A. Dalrymple, editor, International Conference on Physical Modeling, University of Delaware, Newark, Delaware, August, 1981, A.A. Balkema, Rotterdam/Boston, 1985.
25. Weggel, J. Richard, "Analysis Method for Studying Sedimentation Patterns", *Journal of the Waterway, Port, Coastal & Ocean Division*, ASCE, WW2, May 1983.
26. Walton, T.L. and J.R. Weggel, "Computational Algorithm for Longshore Energy Flux Incorporating Friction", Proceedings of the 18th International Conference on Coastal Engineering, Cape Town, South Africa, November, 1982.
27. Weggel, J. Richard, "The Design of Weir Sand By-Passing Systems", Proceedings of the Coastal Structures '83 Conference, Arlington, Virginia, 9-11 March 1983.
28. Weggel, J. Richard, "Sediment Budget Calculations, Oceanside, California", Miscellaneous Paper CERC-83-7, Coastal Engineering Research Center, Vicksburg, Mississippi, December, 1983.
29. Sorensen, R.M. and J.R. Weggel, "Development of Ship Wave Design Information," Proceedings of the 18th International Conference on Coastal Engineering, Houston, Texas, September, 1984.
30. Sorensen, R.M. and J.R. Weggel, "Evaluation of Functional Behavior of Shore Structures and Related Shoreline Processes in Support of Planned 1985 Beach Nourishment at Atlantic City," Proceedings, Ninth Annual Conference of the Coastal Society, *Gambling with the Shore*, Atlantic City, NJ, October 14-17, 1984.
31. Weggel, J.R. and N. Rajendran, "Optimization of a Shore Protection Scheme for the West Coast of India," Proceedings of the International Conference on Ocean Space Utilization, Ocean Space '85, Tokyo, Japan, June 1985, pp. 237-248.

32. Weggel, J. Richard, in *The Design and Construction of Mounds for Breakwaters and Coastal Protection*, P. Bruun, editor, Elsevier/North Holland Publishing Co., New York, NY, 1985.
33. Sorensen, R.M. and J.R. Weggel, "Evaluation of Beach Behavior and Coastal Structure Effect at Atlantic City, NJ," Fritz Engineering Lab Report No. 200.85.811.1, Lehigh University, Bethlehem, PA, April 1985.
34. Weggel, J.R. and S.L. Douglass, "An Interactive BASIC Program to Calculate Shallow Water, Limited Fetch Wave Conditions," Hydraulics and Hydrology Laboratory Report 85-1, Drexel University, Philadelphia, PA, September 1985.
35. Weggel, J. Richard, "Economics of Beach Nourishment Under a Scenario of Rising Sea Level," *Journal of Waterway, Port, Coastal and Ocean Engineering*, ASCE Vol. 112, No. 3, May 1986.
36. Weggel, J.R. and R.M. Sorensen, "Ship Wave Prediction for Port and Channel Design," Proceedings, ASCE Specialty Conference, Ports '85, Oakland, CA, May, 1986.
37. Weggel, J.R. and S.L. Douglass, "Synthetic Generation of Longshore Sand Transport Data and Simulation of Sand Bypassing at Indian River Inlet, Delaware," Hydraulics and Hydrology Laboratory Report 86-1, Drexel University, Philadelphia, PA, May 1986.
38. Douglass, S.L. and J.R. Weggel, "Estimation and Synthetic Generation of Longshore Sand Transport Data and Simulation of Sand Bypassing at Manasquan Inlet, New Jersey," Hydraulics and Hydrology Laboratory Report 86-2, Drexel University, Philadelphia, PA, September 1986.
39. Douglass, S.L. and J.R. Weggel, "Performance of a Perched Beach at Slaughter Beach, Delaware," Hydraulics and Hydrology Laboratory Report 87-1, Drexel University, Philadelphia, PA, January 1987.
40. Sorensen, R.M. and J.R. Weggel, "Beach Behavior and Effect of Coastal Structures, Bradley Beach, New Jersey," Report IHL-122-87, Imbt Hydraulics Laboratory, Lehigh University, Bethlehem, PA, February 1987.
41. Weggel, J.R., J.C. Escajadillo and T. Ting, "A Comparison of the Performance of Three Types of Groins," Proceedings, Second

International Conference on Coastal and Port Engineering in Developing Countries, Beijing, PRC, September 1987.

42. Weggel, J.R., M. Perlin, "Statistical Description of Longshore Transport Environment," *Journal of Waterway, Port, Coastal and Ocean Engineering*, ASCE, Vol. 114, No. 2, March 1988.

43. Weggel, J.R., S.L. Douglass & J. Tunnell, "Sand-Bypassing Simulation Using Synthetic Longshore Transport Data," *Journal of Waterway, Port, Coastal and Ocean Engineering*, ASCE, Vol. 114, No. 2, March 1988.

44. Weggel, J.R., S. Brown, J.C. Escajadillo, P. Breen & E.L. Doheny, "The Cost of Defending Developed Shorelines along Sheltered Waters of the United States from a Two Meter Rise in Mean Sea Level," prepared for the U.S. Environmental Protection Agency, Drexel University Coastal Engineering and Geology Program Report, June 1988.

45. Weggel, J.R., S.L. Douglass & R.M. Sorensen, "An Engineering Study of Ocean City's Beaches, New Jersey, USA", Chapter 213, Proceedings, 21st International Conference on Coastal Engineering, Costa del Sol-Malaga, Spain, 20-25 June 1988, pp. 2867-2881.

46. Sorensen, R.M., S.L. Douglass & J.R. Weggel, "Results from the Atlantic City, NJ Beach Nourishment Monitoring Program," Chapter 2806, Proceedings, 21st International Conference on Coastal Engineering, Costa del Sol-Malaga, Spain, 20-25 June 1988, pp. 2806-2817.

47. Douglass, S.L & J.R. Weggel, "Laboratory Experiments on the Influence of Wind on Nearshore Wave Breaking," Chapter 46, Proceedings, 21st International Conference on Coastal Engineering, Costa del Sol-Malaga, Spain, 20-25 June 1988, pp. 632-643.

48. Weggel, J.R. "Seawalls: The Need for Research, Dimensional Considerations and a Suggested Classification," *Journal of Coastal Research*, Special Issue #4, The Effect of Seawalls on the Beach, N. Kraus & O. Pilkey, editors, September 1988

49. Weggel, J.R. & E.L. Doheny "The Cost of Protecting Sheltered Shorelines of the United States from a 2-Meter Rise in Mean Sea Level," Proceedings, Clean Energy Conference, Miami, FL, December 1989.

50. Weggel, J.R. & S.L. Farrell "The Effect of a Shore-Parallel Offshore Breakwater on the Beaches at Ocean City, NJ," Proceedings of the 22nd International Conference on Coastal Engineering, Delft, the Netherlands, July, 1990.
51. Doheny, E.J. & J.R. Weggel "Application to Townsends Inlet of a Numerical Model Using the Characteristic Equations of Open Channel Flow," Final Report, New Jersey Sea Grant Project R/S-9, Department of Civil and Architectural Engineering, Hydraulics and Hydrology Laboratory Report 90-1, September 1990.
52. Titus, J.G., R.A. Park, S.P. Leatherman, J.R. Weggel, M.S. Greene, P.W. Mausel, S. Brown, C. Gaunt, M. Trehan, and G. Yohe "Greenhouse Effect and Sea Level Rise: Potential Loss of Land and the Cost of Holding Back the Sea," *Coastal Management*, 1991.
53. Martin, J.P., J.R. Weggel, M. Bruno and S. Halsey "The Use of High Fly Ash Concrete for Marine Structures," Proceedings, 9th International Coal Ash Utilization Symposium, January 22-25, 1991, Orlando, FL
54. Weggel, J.R. & R.M. Sorensen "Performance of the 1986 Atlantic City, New Jersey, Beach Nourishment Project," *Shore & Beach*, Journal of the American Shore and Beach Preservation Association, Vol. 59, No. 3, July 1991
55. Weggel, J.R. & R.N. Rustom, "Soil Erosion by Rainfall and Runoff - State of the Art," Proceedings, 5th Geosynthetic Research Institute Seminar, Drexel University, Philadelphia, PA, December 12-13, 1991.
56. Weggel, J.R. & A. Gontar, "A Thickness Equation for Nonwoven, Needle-punched Geotextiles Under Normal Loading," *Geotechnical Testing Journal*, ASTM, December 1992, pp. 404-408.
57. Sorensen, R.M. & J.R. Weggel "Field Monitoring of a Modular Detached Breakwater System," Proceedings, Coastal Engineering Practice '92, ASCE, Long Beach, CA, 9-11 March 1992, pp. 189-204.
58. Weggel, J.R. & R. Rustom, "Soil Erosion by and Rainfall and Runoff - State of the Art," *Geotextiles Geomembranes*, Vol. 11, No. 4, 1992, pp. 645-666.
59. Rustom, R.N. & J.R. Weggel, "A Study of Erosion Control Systems: Experimental Apparatus," Proceedings, International Erosion Control Association Conference, Indianapolis, IN, February 1993.

60. Rustom, R.N. & J.R. Weggel, "A Study of Erosion Control Systems: Experimental Results," Proceedings, International Erosion Control Association Conference, Indianapolis, IN, February 1993.
61. Weggel, J.R. & A. Gontar, "In-Plane Air Flow Through Needle-punched, Nonwoven Geotextiles Under Normal Loading," *Geotechnical Testing Journal*, ASTM, June 1993, pp. 207-215.
62. Doheny, E.L. & J.R. Weggel, "The Cost of Defending Long Beach Island, NJ, from a Two Meter Rise in Mean Sea Level," Proceedings, The Hilton Head Island, South Carolina, USA, International Coastal Symposium, June 6-9, 1993, Vol. II, pp. 374-383.
63. Rustom, R.N. & J.R. Weggel, "A Laboratory Investigation of the Role of Geosynthetics in Interill Soil Erosion and Sediment Control," *Geotechnical Fabric Reports*, April, 1993
64. Weggel, J.R., W.F. Baird, B. Edge, O.T. Magoon, E. Mansard, D.D. Treadwell & R.W. Whalin, "Sines Breakwater Revisited - Repair and Reconstruction," Proceedings, ASCE Specialty Conference, Case Histories for the Design, Construction, and Maintenance of Rubble-Mound Structures, Eureka CA, May, 1994.
65. Weggel, J.R. et al. (ASCE Rubble Mound Structures Committee) "Rehabilitation of the West Breakwater - Port of Sines," Proceedings, 24th International Conference on Coastal Engineering, Kobe, Japan, October 1994.
66. Weggel, J.R. "A Primer on Monitoring Beach Nourishment Projects." *Shore & Beach*, Journal of the American Shore and Beach Preservation Association, Vol. 63, No. 3, July 1995.
67. Weggel, J.R., M. Morreale & R. Giegengack, "The Ocean City, New Jersey, Beach Nourishment Project: Monitoring its Early Performance," *Shore & Beach*, Journal of the American Shore and Beach Preservation Association, Vol. 63, No. 3, July 1995.
68. Webb, R. & J.R. Weggel, "Design of Groin Fields - Dimensional Considerations," Proceedings, Conference on Coastal and Port Engineering in Developing Countries (COPEDEC) , Rio de Janeiro, September 1995.

69. Seymour, R.J., N.E. Bockstael, T.J. Campbell, R.G. Dean, P.D. Komar, O.H. Pilkey, Jr., A.P. Pratt, M.R. Snow, R.F. VanDolah, J.R. Weggel & R.L. Wiegel, *Beach Nourishment and Protection*, National Research Council, Marine Board, National Academy Press, 2101 Constitution Avenue NW, Washington, DC, December 1995.
70. Weggel, J.R. discussion of "Breaking Wave Loads on Vertical Walls Suspended above Mean Sea Level" by Chan, Cheong & Gin, *Journal of Waterway, Port, Coastal and Ocean Engineering*, ASCE, May 1997.
71. Weggel, J.R. "Maximum Daily Wind Gusts Related to Mean Daily Wind Speed," *Journal of Structural Engineering*, ASCE, Vol. 125, No. 4, April 1999.
72. Weggel, J.R. "Geosynthetic Erosion Control Systems for the 21st Century: New Solutions to Old Problems," *Geosynthetics in the Future: Year 2000 and Beyond*, Proceedings of the 13th GRI Conference, edited by R.M. Koerner, G.R. Koerner, Y.G. Hsuan & M.V. Ashley, December 1999.
73. Weggel, J.R. & B. Marengo (1999) "A Schuylkill River Model for the Vicinity of the Queen Lane Water Intake and the Wissahickon Creek, Philadelphia, PA" prepared for the City of Philadelphia Water Department by Drexel University, Department of Civil & Architectural Engineering, 30 June 1999.
74. Valentine, A., V.M. Arms & J.R. Weggel, "Assessing Innovative, Project-Based Learning in Drexel's Freshman Core Curriculum," Proceedings of the 2001 ASEE Annual Conference & Exposition, Albuquerque, NM, 24-27 June 2001.
75. Weggel, J. Richard (2004) "Visibility over Shorefront Sand Dunes: Maintaining an 'Ocean View,'" *Shore & Beach*, Journal of the American Shore and Beach Preservation Association, Vol. 72, No. 4, Fall 2004, pp 3-4.
76. Weggel, J. Richard (2005) "On the Stability of Shore-Parallel Geotextile Tubes for Shore Protection," Proceedings, ASCE Geo-Frontiers Conference, Austin, TX, 26 January 2005.
77. Weggel, J. Richard & Joseph Lomax (2005) "Predicting Coastal Sand Dune Growth Rates at the Wildwood Convention and Civic Center, Wildwood, NJ," Proceedings, ASCE Solutions to Coastal Disasters Conference, Charleston, SC, 8-11 May 2005.

78. Weggel, J.R. & J. Lesnick "Did this Seawall Cause Erosion, *Shore & Beach, Journal of the American Shore & Beach Preservation Association*, Vol. 74, No. 3, Summer 2008, pp24-25.
79. Weggel, J.R. & D.C Weggel (2006) "Development of a Coastal Sand Dune Management Program," 7th International Conference HydroScience and Engineering, Drexel University, Philadelphia, PA, 10-14 September 2006.
80. Weggel, J.R. & R.M. Koerner (2007) Floating (Geogrid Supported) Geomembrane Megabags for Emergency Water Supply," GRI-20 Conference, Geosynthetics 2007, Washington, DC, 16-19 January 2007.
81. Weggel, J.R, J.K. Walz, J. Lomax & M. Sray (2007) "Using a Global Positioning System to Measure Tidal Currents in Absecon Inlet, Atlantic City, NJ," *Journal of Surveying Engineering*, ASCE, November 2007.
82. Ward, N.D., J.A. Gebert & J.R. Weggel (2008) "A Hydraulic Study of the Chesapeake and Delaware Canal," *Journal of Waterway, Port, Coastal & Ocean Engineering*, ASCE.
83. Weggel, J. Richard, "Wave and Current Loading on Geosynthetic Fish Pens and Cages," (2008) GRI-21 Conference Proceedings, Agriculture & Aquaculture, GeoAmericas 2008, Cancun, Mexico, 2-5 March 2008.
84. Weggel, J.R., J. Mitchell & C. Haas, (2008) "Two Introductory Civil, Architectural and Environmental Engineering Courses," ASEE Conference, Pittsburgh, PA, June 2008.
85. Weggel, J.R (2009) "Development of a Salt Marsh at Holt's Landing State Park, Delaware," presented at the Northeast Shore and Beach Preservation Association Meeting, Woods Hole, MA, 21-23 September 2009 (abstract only)
86. Weggel, J.R., J. Dortch & D. Gaffney, (2010) "Analysis of fluid discharge from a hanging geotextile bag," *Geotextiles & Geomembranes*, Vol. 29, pp 65-73.
87. Weggel, J.R., J. Dortch & V.Z. Merida (2011) "Experiments with water and slurries in hanging geotextile bags: A further appraisal," *Geotextiles & Geomembranes*, Vol. 29, (2011) pp 502-513.
88. Weggel, J.R. (2011) "Are Floods on the Delaware River Getting Worse?" *Journal of Hydrologic Engineering*, ASCE, March 2011

89. Weggel, J. R. (2011) "The Impact of Opening an Inlet in the Delaware Bay at Norbury's Landing, NJ," *Journal of Coastal Research*, March 2011.
90. Weggel, J. R. & N. D. Ward (2012) "A model for filter cake formation on geotextiles: Theory," *Geotextiles & Geomembranes*, Vol. 31, (2012) pp 51-61.
91. Weggel, J. R. & J. Dortch (2012) "A model for filter cake formation on geotextiles: Experiments," *Geotextiles & Geomembranes*, Vol. 31, (2012) pp 62-68.
92. Weggel, J.R., C.M. Benedict & A.M. Mouradian (2011) "Beach Replenishment for Amtrak's Niantic River Bridge Replacement," *GeoStrata*, ASCE Geo Institute, Nov.-Dec. 2011.
93. Weggel, J.R. & N.D. Ward (2013) "The Mechanics of Filter Cake Formation on a Geotextile," Proceedings of the Geosynthetics 2013 Conference, Long Beach, CA, 1-4 April 2013.
94. Weggel, J.R. & R.N. Rustom (2014) "An Analogy for the Overland Flow Hydrograph: Filling and Draining a Permeable Bag," *Journal of Hydrological Engineering*, ASCE, Vol. 19, No. 1, January 2014.
95. Weggel, J.R., P. Gallagher & Y. Lin (201x) "Transport of a Dilute Aqueous Suspension of Colloidal Silica through a Porous Medium," in preparation.

CONSULTING ACTIVITIES:

1. US Army Engineer District, Los Angeles - Oceanside, California - preparation of sediment budget for a shoreline erosion control study and sand-bypassing study.
2. National Park Service & US Army Engineer District, San Francisco - Ocean Beach, San Francisco, California - shoreline erosion control project, determination of local coastal processes and evaluation of the suitability of excavation materials for use as beach fill.
3. US Army Engineer District, Savannah - Savannah River Tide Gates - evaluation of the dynamics of tide gates under the action of wind generated waves and establishment of gate operating procedures for periods of predicted high waves.
4. US Coast Guard - Shark River Boat Basin, Shark River, New Jersey - hydraulic model study of wave induced agitation in Coast Guard boat basin and recommendations for basin modifications.
5. US Army Engineer District, Savannah - Tybee Island, Georgia - design of modifications to a terminal groin at the northern terminus of the Tybee Island beach fill project, functional design of a weir/groin system and determination of wave loading on a concrete sheet-pile groin at the southern terminus of the project.
6. US Army Engineer District, Los Angeles - Ventura Harbor, California - evaluation of visual wave observation data to determine coastal processes at Ventura Harbor.
7. Board of Engineers for Rivers and Harbors, Corps of Engineers - Mill Cove, Jacksonville Harbor, Florida - develop methodology for data analysis to study shoaling patterns in Mill Cove.
8. Organization of American States - Argentina - present lectures on coastal structure design at Argentine Naval Hydrographic Office and consult on coastal problems at Mar del Plata, Argentina.
9. US Army Engineer District, Buffalo - Vermilion Harbor, Ohio - consultation on effect of harbor entrance breakwater on sand distribution along adjacent beaches and possible remedial measures.

10. US Army Engineer District, Buffalo - Lakeview Park, Lorain, Ohio - consultation on the development of a monitoring program to evaluate the performance of three offshore breakwaters as shore protection.
11. US Army Engineer District, Philadelphia, and State of New Jersey - consultation on plans to nourish beach at north end of Ocean City, New Jersey and review of plans by the State of New Jersey to construct groins to stabilize fill.
12. US Army Engineer District, Chicago - Racine Harbor, Wisconsin - consultation on a sedimentation problem at municipal small boat launching facility.
13. US Army Engineer District, New York - Lentz Marina, Keansburg, New Jersey - determination of causes of shoaling in marina vis-à-vis operation of a tidal flood gates.
14. Chief of Engineers, US Army Corps of Engineers - Loe's Highpoint Resort, Lake Texoma, Dennison, Texas - evaluate the feasibility of using a floating breakwater to alleviate wave problems in a marina.
15. US Army Engineer District, Charleston - Murrells and Little River Inlets, South Carolina - development of project monitoring programs to evaluate project effects on adjacent shorelines and performance of rubble-mound jetties.
16. US Army Engineer Division, New England - Popham Beach, Maine - evaluation of permit application for local shore protection.
17. Federal Emergency Management Agency - review of the methodology for adding wave elevations to coastal storm flood elevations.
18. Federal Emergency Management Agency - review of an appeal by the State of Alabama to the FIA of wave elevations for coastal flood hazard maps.
19. Department of Energy - consultation on the scope of work and model test program for shelf-mounted tower and heat exchangers for the Offshore Thermal Energy Conversion (OTEC) project.
20. Department of Justice - US vs. State of California - expert witness testimony before a Special Master of the US Supreme Court on the effect of coastal structures on the shoreline.

21. State of New Jersey - coastal processes study of Atlantic City, New Jersey, in preparation for a beach nourishment project which included an evaluation of the suitability of sand from various alternative sources.
22. Hydro Research Science, Inc. - consultation on model test results of protective structures proposed to encircle piers of the Sunshine Skyway Bridge, Tampa, Florida.
23. Hydro Research Science, Inc. - consultation on model testing program to study possible breaking wave impact forces on the Offshore Thermal Energy Conversion (OTEC) Land Based Containment Structure, Kahe, Hawaii. Tests also considered the effect of the LBCS on local surfing conditions and on the littoral processes along nearby beaches.
24. City of Ocean City, NJ - consultation on the effects of a proposed shore protection structure on flooding and erosion of adjacent property.
25. Hidroservice S.A. (Brazil) - study of sedimentation processes at the entrance to the Rio Sergipe at Aracaju, Sergipe State, Brazil, for navigation channel maintenance and sand bypassing and to preclude erosion damage to updrift and downdrift recreation beaches.
26. Township of Egg Harbor, NJ - consultation on the wave environment and the wave forces on a timber bulkhead breakwater at the site of a proposed marina inside of Great Egg Harbor Inlet.
27. University of Texas at Austin - State of Texas - review proposal to reconstruct and modify Rollover Fish Pass, Gilchrist, TX, and determine the inlet's role in causing local beach erosion and sedimentation within the Gulf Intracoastal Waterway. Evaluate the feasibility of reopening and maintaining the Corpus Christi Fish Pass.
28. City of Aracaju, Sergipe State, Brazil (EMURB) - investigate critical erosion problem and resulting seawall failure at Coreo do Meio beaches along the entrance to the Rio Sergipe estuary and recommend solution for mitigating problem.
29. Connelly Containers, Inc. - investigation of the feasibility of withdrawing water from the Manayunk Canal for generating hydropower at the Connelly Containers, Inc. plant on Venice Island, Manayunk, Philadelphia.
30. Betz, Converse & Murdoch, Inc. - consultation on plans for a dispersion study along the Delaware River at Bristol, PA.

31. US Army Engineer District, Philadelphia - synthetic generation of longshore sand transport data and simulation of the operation of a sand bypassing system for Indian River Inlet, DE.
32. Hudson GEOTECH International - flood damage study at Valhoma Creek, Tulsa, OK.
33. Public Storage, Inc. - study of flood potential and design of remedial measures for Southampton Creek, Warminster, PA.
34. US Army Coastal Engineering Research Center - preparation of an Engineer Manual on the design of shoreline erosion control structures.
35. US Coast Guard - evaluation of wind- and ship-generated waves at a proposed Marine Safety Office site on the Delaware River, Philadelphia, PA.
36. International Playtex, Inc. - coastal processes of tampon applicators in the marine environment.
37. Rogers, Golden & Halpern, Inc. - consultation on sand bypassing system design for Indian River Inlet, DE.
38. Pennoni Associates, Inc. - develop wind- and ship-wave environment for a proposed marina in Margate, NJ.
39. US Army Engineer District, Philadelphia - synthetic generation of longshore sand transport data and simulation of the operation of a sand bypassing system for Manasquan Inlet, NJ.
40. State of New Jersey - evaluation of coastal processes at Bradley Beach, NJ, and recommendations regarding modifications to shore protection structures.
41. State of New Jersey - recommendations on the location of the navigation channel within Townsends Inlet and the use of sand dredged from the inlet as a source of beach nourishment for Avalon, NJ.
42. Hudson GEOTECH International - flood damage and retaining wall failure, New Hope Playhouse, New Hope, PA.
43. Hudson GEOTECH International - determination of cause of washout and landslide at Point Pleasant pumping station, Point Pleasant, PA.

44. City of Ocean City, NJ - evaluation of proposed dune modifications at two ocean-front residential sites.
45. Dr. Lawrence Pape - evaluation of beach conditions and bulkhead stability for a property on Shelter Island, Long Island, NY.
46. Mr. Robert Gerard - evaluation of a proposed solution to a flooding problem at 9236 Bryn Mawr Avenue, Pennsauken, NJ.
47. City of Ocean City, NJ - preliminary design of a nearshore breakwater to stabilize and protect Ocean City's beach in the vicinity of 9th Street.
48. City of Ocean City, NJ - evaluation of the suitability of sand from Drag Island, NJ as a source of beach nourishment for Ocean City.
49. Hudson GEOTECH International - hydrologic investigation of area upstream of B & O Railroad embankment failure.
50. City of Ocean City, NJ - preparation of a coastal sand dune development and maintenance program for the City of Ocean City.
51. State of New Jersey - evaluation of the performance of a beach nourishment project at Atlantic City, NJ.
52. New Jersey Marine Sciences Consortium - consultation on the development of a nearshore current/circulation measurement program in support of ocean pollution study by NJMSC.
53. Andropogon Associates, Inc. - hydrologic study of creek through Trexler Park, Allentown, PA
54. Hudson GEOTECH International, Inc. - evaluation of seismic analysis of site for solar energy conversion plant in California.
55. Friends of the Wissahickon - hydrologic and hydraulic analysis of the Gorgas Lane tributary of the Wissahickon Creek, Fairmount Park, Philadelphia, PA to determine how improvements can be made to reduce flooding and erosion.
56. Mid West Construction, Inc. - consultation on construction of marina breakwater in Lake Michigan.

57. Dravo-Van Houten, Inc. - consultation on potential for sedimentation problems in Port Reitz harbor expansion navigation channel, Mombassa, Kenya.
58. Dravo-Van Houten, Inc. - evaluation of longshore sediment transport conditions along south coast of Long Island in the vicinity of Fire Island Inlet, Suffolk County, NY to determine effect of structures proposed to protect Suffolk County sewer outfall where it crosses beach.
59. Offshore & Coastal Technologies, Inc. - review of the rubble toe protection design for a revetment at Ocean City, MD
60. M.V. Engineering & Lomax Associates, Inc. - water circulation analysis for a proposed lagoon in a marina planned for Cape May Harbor, NJ.
61. Lynch, Martin & Philibosian, Attorneys - determination of the cause of flooding at Moor's Landing, NJ along the Manasquan River.
62. New Jersey Shore Foundation and Lehigh University - monitoring the effects of a shore-parallel, precast concrete breakwater system on the beaches of Sea Isle City, NJ.
63. City of Ocean City, New Jersey - testimony before Zoning Board on the results of a dune study prepared for the City of Ocean City.
64. Woodward-Clyde Consultants - flood level determination for industrial site along the Delaware Bay in southern New Jersey.
65. MV Engineering - determination of flushing characteristics of a lagoon proposed for marina development in Cape May, NJ.
66. US Army Corps of Engineers, Philadelphia District - consultant on construction claims at Barnegat Inlet, NJ, New South Jetty construction.
67. Lisa Hardy, Esq. - consultation on State of New Jersey constraints on coastal sand dunes and beach front development.
68. White Horse Village - determination of seepage rates through a gabion dam and evaluation of flood attenuation performance of dam and detention basin.

69. International Environmental Services, Inc. - evaluation of flooding experienced in the vicinity of Granite Run Mall, Media, PA, due to rainstorm of 13 July 1991.
70. Clark, Ladner, Fortenbaugh & Young - evaluation of cause of flooding at Brooks Armored Car building on Governor Printz Boulevard due to storm of 5 July 1989 at Shellpot Creek, New Castle County, Delaware.
71. Walker, Previti, Holmes & Associates - consultation on design of timber and stone groins for Sea Isle City, New Jersey, and evaluation of the groins' impact on downdrift beaches.
72. Associated Construction Technologies, Inc. - evaluation of the hydraulic performance of three screw pumps at Salem Wastewater Treatment Plant, New Jersey.
73. U.S. Army Corps of Engineers, Coastal Engineering Research Center - participation in workshop to define contents of coastal structure planning and design chapters of Coastal Engineering Manual.
74. U.S. Army Corps of Engineers, Coastal Engineering Research Center - preparation of Coastal Engineering Manual Chapter entitled "Wind Blown Sand Transport."
75. West End Boat Club & Sullivan Floation Systems, Inc. - wind and ship wave analysis for a marina site, Delaware River, Essington, PA.
76. City of Ocean City, NJ - preliminary evaluation of proposed dredging of backbay lagoons and marinas.
77. Pennoni Associates, Inc. - evaluation of the hydraulics of the Manayunk Canal and the design of hydraulic structures to control flow as part of a project to rehabilitate the canal in Philadelphia, PA
78. City of Sea Isle City/Walker Previti, Holmes & Associates, Inc. - design of groin field for north end of Sea Isle City, New Jersey
79. Greater Wildwoods Development and Tourism Authority - study of beach processes in the vicinity of the proposed Wildwood Convention Center.
80. Poverty Beach Joint Venture - study of coastal processes at the site of a proposed development in Cape May, New Jersey.

81. Seneca Pointe Marina, Havre de Grace, MD - wind and ship wave study for proposed marina.
82. Walker, Previti, Holmes & Associates and the City of Sea Isle City, NJ - design of groin field for the northerly beaches of Sea Isle City.
83. Walker, Previti, Holmes & Associates and the City of Sea Isle City, NJ - design of a terminal groin for the Townsend's Inlet shoreline of Sea Isle City.
84. Walker, Previti, Holmes & Associates and the City of Sea Isle City, NJ - sediment budget for beaches south of 88th Street in Sea Isle City and evaluation of alternative shoreline stabilization measures.
85. White & Williams, Attorneys at Law - evaluation of flooding at Cabrini School, Fairless Hills, Bucks County, PA
86. Law Offices of Robert A. Stutman - investigation of reservoir regulations and cause of flooding at Perryville Yacht Club, Perryville, MD on 20 January 1996.
87. Boles, Smyth & Associates – regulatory flood study for proposed residential development on Venice Island, Manayunk, Philadelphia, PA.
88. Archdiocese of Philadelphia, Catholic Cemeteries Office – analysis of proposed grave vault spacing on groundwater infiltration rates.
89. Pennoni Associates, Inc. – evaluation of scour and deposition potential resulting from new supplementary piling to support pier.
90. Walker, Previti, Holmes & Associates – evaluation of potential impacts on Sea Isle City of extending 8th Street jetty in Avalon, New Jersey.
91. T. Sharp, Inc. - redesign of vinyl bulkhead for Harbor View Park, Cape May, New Jersey.
92. Geosystems Consultants, Inc. – determination of wave environment and wave and current loads on a sheet pile jetty at Motiva refinery facilities, Delaware City, DE.
93. S.T. Hudson Engineers, Inc. – design of a nearshore breakwater system for wetlands development at Holt's Landing State Park, Delaware.

94. State of Washington, Washington Fast Ferries – service on an expert review panel to evaluate the impact of high speed ferry operations on beaches and shoreline structures in Rich Passage.
95. Golden, Rothschild, Spagnola, Lundell & Levitt, PC – expert report on coastal processes relative to drowning incident at Jenkinson’s Beach, Point Pleasant, NJ.
96. New Jersey Sports and Exposition Authority – prediction of dune growth rates and monitoring of dunes at site of proposed Wildwood Civic Center, Wildwood, NJ.
97. New Jersey Visitor and Convention Bureau, Wildwood Convention and Civic Center - review of FEMA requirements for the construction of a hotel in the V-zone and the requirements to reclassify the site.
98. NSF Cyber Security Workshop - editorial review of workshop proceedings
99. Paragon at Seaside Heights – review of dune conditions at site of proposed development
100. FHWA/University of South Alabama – Advisory Panel, preparation of a technical report addressing the design and construction of highways in coastal area.
101. Gannett-Fleming, Inc. – preliminary design of shore protection for AMTRAK’s Niantic River Bridge
102. Gannett-Fleming, Inc. – preliminary design of shore protection for Deep Creek Lake, MD
103. Gannett-Fleming, Inc. – preliminary design of shore protection for Little Deal Island, MD
104. Gannett-Fleming, Hardesty & Hanover, AMTRAK – design of beach nourishment and jetty project at Niantic River crossing, Town of East Lyme, CT.
105. Vincent Sansone – analysis of level of shore protection provided if Strathmere dune line is moved seaward.
106. Gannett-Fleming, Inc. – analysis of tidal datum information at Hackensack, NJ.

107. Joseph, Greenwald & Laake – expert witness for wrongful death lawsuit, Turks & Caicos Islands
108. John Kornick Associates – evaluation of bulkhead and its impact on the establishment of wetlands at a property in North Wildwood, NJ.
109. White & Williams – forensic investigation of the cause of flooding in Building 500 at the Atrium Corporate Park, Somerset, NJ.
110. Michael Lorenz – evaluation of the condition of a bulkhead at 40 Waterway Road, Ocean City, NJ.
111. Matthiesen, Wakert & Lehrer – evaluation of the cause of flooding at the Condor Automotive facility, Dresher, PA
112. The Morey Organization – testimony to Wildwood Planning Commission on the impact of constructing a amusement facility on the beach at Adventure Pier, Wildwood, NJ and its relation to the FEMA V-Zone.
113. Matthiesen, Wakert & Lehrer – evaluation of the cause of flooding at the Fort Washington Volvo dealership, Fort Washington, PA.
114. Ocean & Coastal Consultants – review of groin design for the Revel Casino, Atlantic City, NJ.
115. Lawrence Smith – review of proposed seawall modifications at 325 Atlantic Avenue, Ocean City, NJ.
116. Thomas McGowan – review of proposed seawall modifications and its terminus at 237 Beach Road, Ocean City, NJ
117. URS Group, Oakland, CA – work for NASA to develop system to produce bio-fuel from algae in geomembrane bags to be deployed in the ocean.
118. Hatch Mott MacDonald – consultation on the selection of a consulting firm to design shore protection for Avalon, NJ.
119. Dr. Kathleen Arena – preparation of a report for obtaining a permit to construct a single family dwelling behind the dune at 5 Beach Road, Villas, NJ.

120. West End Boat Club – evaluation of proposed plan to dredge marina and the necessity of a sheet pile barrier to reduce sedimentation.

121. Lomax Consulting – forensic analysis of the cause of flooding in the Gifford Marina, NJ.

122. Seaboard Marina, Pennsgrove, NJ – development of marina layout and estimate of expected shoaling rates and dredging requirements.

123. Seabreeze Homeowners Association - design of shore protection for Seabreeze, Delaware Bay, NJ

124. John Kornick Associates - Determination of wave environment for marina development at Snug Harbor, Cape May, NJ

125. White & Williams, LLC – evaluation of the cause of flooding at the King of Prussia Mall due to the 1 October 2010 rainfall. Performed an analysis of precipitation data to determine the frequency of occurrence of rainfall.

126. The Woods Hole Group, MA – subcontractor on Corps of Engineers' Philadelphia District Regional Sediment Management Study report preliminary to the preparation of a Feasibility Report on the management of coastal sediments for beach nourishment and navigation maintenance.

127. West End Boat Club, Essington, PA – evaluation of proposed sheet pile cutoff barrier on the rate of sedimentation in the Delaware River marina.

128. Battelle Memorial Institute - participated in the independent external peer review panel to review the Jamaica Bay, Marine Park & Plumb Beach, New York Environmental Restoration Project Draft Interim Feasibility Report, Kings and Queens Counties, New York as a subcontractor to Battelle.

129. ASCE – served as a co-instructor with Mr. Charles Calhoun in an ethics course given at the Coastal, Ocean, Port & River Institute's (COPRI) Congress, Memphis, TN, November 2010.

130. Piers Marina – developed wind and ship wave environment for the design of a floating breakwater, December 2011.

131. Gannett-Fleming – developed water level and wind wave conditions for reservoir modifications for the Tampa Bay Water Authority, computed wave forces on intake tower, intake screens, bridge piles,

132. The Woods Hole Group, MA – participated in the development of a feasibility report for the US Army Corps of Engineers' Philadelphia District for their Regional Sediment Management Study. Analyses included inlet dredging analyses, shoreline change mass curve analysis, spatial analysis of offshore borrow areas and their proximity to beach nourishment areas, opportunities for backpassing and Corps sand transport equipment, March 2010 – February 2012.

133. Hyland, Levin, LLC Attorneys – evaluation of dune conditions at the Greenberg property on Long Beach Island, Barnegat Light, NJ, January 2012.

134. Hatch Mott MacDonald – consultation on the evaluation of engineering firm proposals to study the need for coastal structures to mitigate erosion of Avalon, NJ's beaches, January 2012.

135. Langsam, Stevens, Silver and Hollander – consultation on case involving the flooding of a residence.

136. eDesign Dynamics – consultation on a study of the sedimentation at Goldsmith Inlet, Long Island, NJ.

137. Neuberger, Quinn, Gielen, Rubin & Gibber – determination of the cause of flooding during Tropical Storm "Irene" at three nursing homes on the Cape May peninsula.

138. White & Williams – determination of the cause of flooding at Ocean County College TV studio during the storm of 3-4 September 2012.

CONSULTING REPORTS:

1. Weggel, J.R., "Breakwater Design Lectures", Lecture notes published for Advanced Course on Port Planning and Design, University of Buenos Aires, Argentina, September 1983.

2. Weggel, J.R., "Sunshine Skyway Bridge, Tampa, Florida - Review of Model Tests of Proposed Protective Islands", prepared for Hydro Research Service, Inc., Santa Clara, CA, February 1984.

3. Weggel, J.R., "TRW/Offshore Thermal Energy Conversion - Hydraulic Model Tests of Proposed Kahe, Hawaii, Installation", prepared for Hydro Research Science, Inc., Santa Clara, CA. March 1984.
4. Weggel, J.R., "Navigation Channel Maintenance and Sedimentation Control at the Mouth of the Rio Sergipe, Aracaju, Sergipe State, Brazil", prepared for Hidroservice: Engenharia de Projectos, Ltda, Sao Paulo, Brazil, June 1984.
5. Weggel, J.R., "Review of Site Development Plan, Lots 6K, 102K and 103K, Block 200, Ocean City, Cape May County, New Jersey (Berman Property)", prepared for the City of Ocean City, New Jersey, May 1984.
6. Sorensen, R.M. & J.R. Weggel, "Beach Processes and Coastal Structures at Atlantic City, New Jersey", Fritz Engineering Lab Report, Lehigh University, Bethlehem, PA, May 1984.
7. Weggel, J.R. "Review of Wave Environment and Wave Loading on a Breakwater for the Proposed Seaview Marina, Egg Harbor Township, NJ", prepared for the Township of Egg Harbor, November 1984.
8. Weggel, J.R. and R.M. Sorensen, "Review of Plans for the Rehabilitation of Rollover Fish Pass, Gilcrist, Texas", prepared for the University of Texan at Austin, April 1985.
9. Weggel, J.R. "Wind and Ship Waves at the US Coast Guard's Delaware River Marine Safety Office Site and Recommendations for a Wave Attenuating Breakwater," prepared for Commander, Third Coast Guard District, Governors Island, NY, August 1986.
10. Weggel, J.R. "Hydrologic and Hydraulic Analysis - Evaluation of a Proposed Development Plan for Lot 16, Block 24, Warminster, Bucks County, PA," prepared for Public Storage, Inc., Mount Laurel, NJ, March, 1986.
11. Weggel, J.R. "Evaluation of Wave and Current Forces on Proposed Marina Structures at Margate, NJ," prepared for Pennoni Associates, Inc., November 1986.
12. Weggel, J.R. "Preliminary Design of a Nearshore Breakwater to Protect Ocean City's Beach in the Vicinity of 9th Street," prepared for the City of Ocean City, NJ, January 1987.

13. Weggel, J.R. "Suitability of Sand from Drag Island as Beach Nourishment for Ocean City, New Jersey," prepared for the City of Ocean City, NJ, August 1987.
14. Douglass, S.L. & J.R. Weggel "Hydrologic Investigation of the B & O Railway Failure," prepared for Hudson GEOTECH International, File No. G 5307, May 1987.
15. Sorensen, R.M. & J.R. Weggel "Improvement of Beach Conditions and Bulkhead Stability for Property Located at 68 Gardiners Bay Drive, Shelter Island, NY," prepared for Dr. Lawrence Pape, June 1987.
16. Weggel, J.R. "A Dune Establishment and Maintenance Program for the City of Ocean City, New Jersey," prepared for the City of Ocean City, New Jersey, Coastal & Marina Engineering Consultants, Inc., June 1988.
17. Weggel, J.R. "Report on Flooding, Jervis Collision Center & Philmont Associates Properties, Philmont Road, Bucks County, PA" prepared for Berlinger & Small, Attorneys at Law, Abington, PA, November 1988.
18. Weggel, J.R. "Longshore Sand Transport Analysis, Suffolk County Sewer Outfall Site, Cedar Island Beach, Long Island, New York, prepared for Dravo-VanHouten, 11 Penn Plaza, New York, NY, 16 January 1989.
19. Sorensen, R.M., J.R. Weggel & S.L. Douglass, "Monitoring and Evaluation of 1986 Beach Nourishment, Atlantic City, New Jersey," Marina & Coastal Engineering Consultants, Inc., prepared for the State of New Jersey, Division of Coastal Resources, February 1989.
20. Weggel, J.R. & T.Z. Wilson, "A Hydrologic Investigation of the Gorgas Lane Tributary of the Wissahickon Creek, Philadelphia, PA," prepared for Friends of the Wissahickon, 24 June 1989.
21. Weggel, J.R. "Evaluation of the Flushing Characteristics of a Proposed Marina Lagoon at Cape May, NJ," prepared for M.V. Engineering, Cape May Court House, NJ, March 1990.
22. Weggel, J.R. "Interim Report - Barnegat Inlet New South Jetty Construction Claim," prepared for Philadelphia District, US Army Corps of Engineers under contract DACW-90-M-1140, March 1991.
23. Weggel, J.R. "Barnegat Inlet - Review of a Consulting Report by R.G. Dean Prepared for Morrison-Knudsen Company, Inc." prepared for

Philadelphia District, US Army Corps of Engineers under contract DACW-90-M-1140, August 1991.

24. Weggel, J.R. "An Investigation of Flooding Caused by the 13 July 1991 Storm at Granite Run Mall, Media, PA," prepared for International Environmental Services, Inc. 595 East Swedesford Road, Suite 2000, Wayne PA, February 1992.

25. Weggel, J.R. "Computation of Potential Seepage through a Gabion Dam at White Horse Village, Newtown Square, PA and a Determination of its Effect on Flood Discharge Attenuation," prepared for White Horse Village, Newtown Square, PA and Bower Lewis Thrower/Architects, Philadelphia, PA, February 1992.

26. Weggel, J.R. "Beach Profile and Groin Behavior Analyses, Sea Isle City, New Jersey," prepared for Walker, Previti, Holmes & Associates and the City of Sea Isle City, NJ, August 1992.

27. Weggel, J.R. "Evaluation of the Cause of Flooding at the Brooks Armored Car Facility, New Castle County, Delaware," prepared for Clark, Ladner, Fortenbaugh & Young, September 1992.

28. Weggel, J.R. "An Assessment of the Effects of the Proposed 83rd and 89th Street Groins on Drowned Beaches, Sea Isle City, New Jersey," prepared for Walker, Previti, Holmes & Associates and the City of Sea Isle City, NJ, November 1992.

29. Weggel, J.R. "Wind and Ship Wave Analysis, West End Boat Club, Delaware River, Essington, PA," prepared for West End Boat Club, Essington, PA, July 1994.

30. Weggel, J.R. "Wind Blown Sand Transport," prepared for the U.S. Army Corps of Engineers Coastal Engineering Research Center under contract DACW-39-93-M-6868, 15 April 1994.

31. Weggel, J.R. "The Cause of Flooding at the Quakertown High School Gymnasium and Recommended Remedial Actions," prepared for CFP Environmental Services, Norwood, PA, 15 March 1995.

32. Weggel, J.R. "Wind-Wave, Ship-Wave and River Current Analysis, Proposed Seneca Pointe Marina, Chesapeake Bay, Havre de Grace, MD, prepared for Headwater Construction Company, Suite 103, Barksdale Professional Center, Barksdale Road, Newark, DE, 25 March 1995.

33. Weggel, J.R. "An Evaluation of the Shoaling of Inside Thorofare at the Bay-Port Condominium, Atlantic City, New Jersey," prepared for Robert Matthews, Linwood, NJ, 14 April 1995
34. Lomax, J.L. & J.R. Weggel, "A Preliminary Assessment of Lagoon Dredging and Dredged Material Management, City of Ocean City, New Jersey," prepared for the City of Ocean City, New Jersey, July 1995
35. Weggel, J.R. "Investigation of Damage to Under-Media Drain Tiles at the North Jersey District Water Supply Commission's Water Treatment Plant, Wanaque, NJ" prepared for International Environmental Services, Wayne, PA, 29 May 1995.
36. Weggel, J.R. "Hydrologic and Hydraulic Analysis of the Manayunk-Schuylkill Canal, Philadelphia, PA," prepared for Pennoni Associates, Inc., Philadelphia, PA, August 1995.
37. Weggel, J.R. "Design of a Groin Field for the Beaches North of Thirty-first Street in Sea Isle City, New Jersey, prepared for the City of Sea Isle City and Walker, Previti, Holmes and Associates, December 1995.
38. Weggel, J.R. "Coastal Processes Relevant to the Proposed Wildwood Convention Center Site, Wildwood, NJ, prepared for the Greater Wildwoods Tourism Improvement and Development Authority, Wildwood, NJ, 27 December 1995.
39. Weggel, J.R. "Sand Budget for Proposed Dune, Greater Wildwoods Civic Center Site, Wildwood, NJ," prepared for the Greater Wildwoods Tourism Improvement and Development Authority, Wildwood, NJ. 27 19 July 1996.
40. Weggel, J.R. "Analysis of Flooding at the Red Cross Building at 7th & Spring Garden Streets, Philadelphia, PA, During the 14 July 1994 Rainstorm," prepared for Law Offices, White & Williams, 1800 Liberty Place, Philadelphia, PA 19103-7395, 3 January 1997.
41. Weggel, J.R. "Design of a Terminal Groin at Townsends Inlet, Sea Isle City, New Jersey," prepared for the City of Sea Isle City and Walker, Previti, Holmes & Associates, 156 Stagecoach Road, Marmora, NJ, 20 June 1996.
42. Weggel, J.R. "Sediment Budget Analysis and Evaluation of Beach Stabilization Alternatives, Townsends Inlet Shoreline, Sea Isle City, New

Jersey,” prepared for the City of Sea Isle City and Walker, Previti, Holmes & Associates, 156 Stagecoach Road, Marmora, NJ, March 1997.

43. Weggel, J.R. “The Impact on Adjacent Beaches of Cutting a Tidal Inlet near Norbury’s Landing, Middle Township, Cape May County, New Jersey,” prepared for Mr. Richard Adelizzi and Levin & Hluchan, Attorneys at Law, Voorhees, NJ, 27 November 1996.

44. Weggel, J.R. & B. Marengo “A Schuylkill River Model for the Vicinity of the Queen Lane Water Intake and the Wissahickon Creek, Philadelphia, PA” prepared for the City of Philadelphia, Water Department by Department of Civil & Architectural Engineering, Drexel University, 30 June 1999.

45. Weggel, J.R. (1999) “Design of Nearshore Breakwaters for Shore Protection and Salt Marsh Development: Holt’s Landing State Park, Indian River Bay, Delaware,” prepared for S.T. Hudson Engineers, Camden, NJ, 7 September 1999.

46. Weggel, J.R. (1999) “Application of ‘DYNLET1’ Inlet Model to Wetlands Design, Northern Mitigation Area, Bayonne, NJ,” prepared for Princeton Hydro LLC, Lambertville, NJ, 2 January 1999.

47. Weggel, J.R. (1998) “Breakwater Designs for Wetlands Mitigation, Bayonne, NJ,” prepared for Princeton Hydro LLC, Lambertville, NJ, 29 November 1998.

48. Weggel, J.R. (1998) “The Effect on Coastal Processes of a Proposed Dwelling, Block 37, Lots 4 & 5, Bay Head, Ocean Count, New Jersey,” prepared for Bennett & Yoskin, Attorneys at Law, Princeton, NJ, 17 April 1999.

49. Weggel, J.R. (1999) “The Impact on Fronting Dunes of Constructing a Home at 5299 Dune Drive, Avalon, NJ,” prepared for Engineering Design Associates, P.A. Ocean View, NJ, 26 January 1999.

50. Weggel, J.R. & R. M. Sorensen (1999) Analysis of Water Levels and Wave Conditions on 17 August 1995 at Jenkinson’s Pavilion Beach, Point Pleasant, New Jersey, Akram Abdul-Majeed v. Jenkinson’s Pavilion,” prepared for Ronald S. Levitt, Esq. Attorney at Law, Golden, Rothschild, Spagnola, Lundell & Levitt, P.C., Bridgewater, NJ, 26 July 1999

51. Weggel, J.R. (1999) "First Dune Monitoring Report, Wildwoods Convention and Civic Center, Wildwood, NJ," prepared for New Jersey Sports and Exposition Authority, East Rutherford, NJ, 20 August 1999.
52. Weggel, J.R. (2000) "Bulkhead Design for Harborview Park, Cape May County, Cape May, New Jersey," prepared for T.J. Sharp, Inc. 303 Washington Lane, Fort Washington, PA 19034.
53. Weggel, J.R. (2000) "The Impact of Proposed Grave Spacing on Groundwater Recharge at All Soul's Cemetery, Brandywine Township, Chester County, PA," prepared for Catholic Cemeteries Office, Archdiocese of Philadelphia, 14 April 2000.
54. Weggel, J.R. (2000) "Flood Hazard Analysis for Proposed Development on Venice Island, Manayunk, Philadelphia, PA," prepared for Boles, Smyth Associates, Inc., 17 January 2000.
55. Weggel, J.R. (2000) "Wave and Wave Force Analysis, Motiva Jetty, Delaware City, Delaware," prepared for GeoSystems Consultants, Inc. Fort Washington, PA, 31 January 2000.
56. Weggel, J.R. (2000) "Wake Impacts of Chinook Class Passenger-Only Ferries in Rich Passage on the Seattle to Bremerton Route, Washington State Ferries," prepared for Washington State Ferries, 20 April 2000.
57. Weggel, J.R. "Coastal Processes in the Vicinity of 39th Street and their Effect on Proposed Development of Lot 16, Block 3901, Ocean City, New Jersey," prepared for Clement F. Lisitski, Esq., Attorney at Law, Ocean City, NJ, 26 February 2001.
58. Weggel, J.R. "Design of Protective Breakwaters for the U.S. Coast Guard Station, Cape May, NJ," prepared for Duffield Associates, Inc. and the US Army Corps of Engineers, Philadelphia, District, 12 January 2001, revised 6 June 2001.
59. Weggel, J.R. "Dune Monitoring Report, Wildwoods Convention and Civic Center, Wildwood, NJ," prepared for New Jersey Sports & Exposition Authority, East Rutherford, NJ, 4 November 2000.
60. Weggel, J.R. "Evaluation of Dune Designation at the Midway Beach Condominium, Berkeley Township, Ocean County, NJ," prepared for the Midway Beach Condominium Association, Toms River, NJ, 30 July 2001.

61. Weggel, J.R. "Design of a Protective Revetment for the Zirkle Property on the Cohansey River, Fairton, NJ," prepared for Princeton Hydro, LLC, Lambertville, NJ, 9 March 2001.
62. Weggel, J.R., "Determination of the Wind and Ship Wave Environment at the Bretnall Property on the Cohansey River, Fairton, NJ., prepared for Princeton Hydro, LLC, Lambertville, NJ, 4 July 2001.
63. Weggel, J.R., "Coastal Processes in the Vicinity of the Tropicana Casino, Atlantic City, NJ," prepared for Ian Jerome, Planner, Absecon, NJ, 28 November 2000.
64. Weggel, J.R., & J.J Mulhern, "Burlington County Farmland Program: Independent Overview: Interim Report," prepared for the Burlington County Board of Chosen Freeholders, Burlington County, New Jersey, 26 October 2000.
65. Weggel, J.R., "Effect of Avalon Jetty Extension on Longshore Transport Rates at Sea Isle City, NJ," letter report to Andrew Previti, Walker, Previti, Holmes & Associates, Marmora, NJ, 19 November 2000.
66. Weggel, J.R. & Michael Piasecki, "Evaluation of Delaware River Flood Levels and Floodway Determination for Tinicum Township, Bucks County, Pennsylvania, as Proposed by the Federal Emergency Management Agency, 27 March 2002," prepared for Delaware Valley Concrete Company, Inc., Hatboro, PA, 15 July 2002.
67. Weggel, J.R. "Wind Waves and Ship Waves at the Proposed Boatworks Marina, Bayonne, New Jersey," prepared for Baker Residential, Morris Plains, NJ, 23 March 2002.
68. Weggel, J.R. "The Impact on Fronting Dunes of Constructing a Home at 5109 Dune Drive, Avalon, NJ," prepared for Engineering Design Associates, P.A., Ocean View, NJ, 28 March 2002.
69. Kriebel, D., J.R. Weggel & R.A. Dalrymple. "Independent Study Report, Brevard County, Florida, Shore Protection Project," prepared for the U.S. Army Corps of Engineers, Jacksonville District under provisions of Section 310, Public Law 106-53, the Rivers and Harbors Act of 2000, draft report, 19 August 2002.
70. Weggel, J.R. "Revetment and Nearshore Breakwaters Design for Shore Protection and Marsh Development, Pea Patch Island, Delaware," prepared for S.T. Hudson Engineers, Camden, NJ, 15 July 2002.

71. Weggel, J.R., "Coastal Flooding & Velocity Zone Analysis, Rambler Road to Cresse Road, Wildwood Crest, New Jersey," prepared for the Borough of Wildwood Crest, Cape May County, NJ, 30 Dec 2002, revised 31 July 2003.

72. Kriebel, D., J.R. Weggel & R.A. Dalrymple (2002) "Independent Study Report, Brevard County Florida Shore Protection Project, prepared for the U.S. Army Corps of Engineers, Jacksonville District and Broward County, Florida, 30 September 2002.

73. Kriebel, D, J.R. Weggel & R.A. Dalrymple "Independent Coastal Engineering Study of Canaveral Harbor and the Brevard County Shore Protection Project," Proceedings of the Florida Shore & Beach Preservation Association Conference, February 2003.

74. Weggel, J. Richard (2004) Coastal Processes at the Stuart Property, Block 855, Lots 1 & 1.01 Township of Upper, Cape May County, Strathmere, NJ, prepared for Mr. Jeffrey Stuart, Strathmere, NJ, 5 January 2004

75. Weggel, J. Richard (2004) Evaluation of Dune Designation at the Osborn Property, Lot 30, Block 36, Brick Township, Ocean County, NJ, prepared for Jack and Carol Osborn, 443 Route 35 South, Brick Township, NJ 08738, 4 May 2004

76. Weggel, J. Richard (2004) Wind Waves and Ship Waves at the Proposed Thames Landing Marina, Quaker Hill, Connecticut, prepared for Forest Homes of New England, LLC, Thames Landing Marina, 64 Scotch Cap Road Quaker Hill, CT 06375, 24 July 2004

77. Weggel, J.R. (2005) "Wind and Ship Waves at the Proposed Seaboard Marina, Absecon Inlet, Atlantic City, NJ." prepared for Nassau Marina Holdings, LLC, 1800 Bay Avenue, Bay Head, NJ 08742, 17 January 2005

78. Weggel, J. Richard (2005) Review of Conditions Causing Flooding Downstream of the Warrington Retail Center and Creekview Phase II Developments, Warrington Township, Bucks County, Pennsylvania prepared for Langsam Stevens & Silver LLP, 1616 Walnut Street, Suite 1700, Philadelphia, PA 19103-5319, 24 March 2005

79. Weggel, J. Richard (2004) Rehoboth Groins – State of Delaware
Weggel, J.R. (2004) "Summary of Observations – Groin Field North of

Rehoboth Beach, Delaware,” prepared for the State of Delaware, 10 December 2004

80. Weggel, J. Richard (2005) “Mondelli Property Dune Impact Evaluation, Lots 6 & 8, Block 7, Barnegat Light, Long Beach Island, New Jersey, “ prepared for Mr. Joseph Mondelli, Sanibel Island, FL, 30 June 2005

81. Weggel, J.R. (2005) “Wind Waves & Ship Waves at the Ocean Beach Marina, Lavallette, New Jersey,” prepared for Nassau Marina Holdings, LLC, 1800 Bay Avenue, Bay Head, NJ 08742

82. Weggel, J.R. (2005) “Wave and Water Level Environment and V-Zone Designation at the Rod ‘n’ Reel Restaurant, Chesapeake Beach, MD,” prepared for Mr. Fred Donovan, 30 April 2005

83. Weggel, J. Richard (2005) “Preliminary Design of Shore Protection, Deep Creek Lake State Park, Garrett County, Maryland,” prepared for Gannett-Fleming, Inc., Seton Business Park, Suite A, 4701 Mount Hope Drive, Baltimore, MD 21215-1883, 19 August 2005.

84. Weggel, J. Richard (2005) “The Cause of Flooding at the Pine Run Community during Tropical Storm Allison, 16-17 June 2001,” prepared for Dugan, Brinkman, Maginnis & Pace, Attorneys at Law, 1880 John F. Kennedy Boulevard, Suite 1400, Philadelphia, PA 19103, 26 July 2005

85. Weggel, J.R. “Flooding at Mack Electrical Systems, 1 North Avenue, Wyncote, Cheltenham Township, PA,” prepared for Mack Electric Devices, Inc., 25 South Avenue, Wyncote, PA 19095-1304, 25 November 2005

86. Weggel, J.R. “The Effect of the Proposed *Martinique Resort Hotel Condominiums* on Wind Patterns and Coastal Processes, Wildwood, NJ,” prepared for Martinique Resorts, L.L.C. 8801 Pacific Avenue, Wildwood, NJ 08260, 17 April 2006

87. Weggel, J.R. “The Effect of the Proposed *Nouveau Wave Hotel* on Wind Patterns and Coastal Processes, Wildwood, NJ,” prepared for Pitcairn Properties, Inc., One Pitcairn Place, Suite 1500, 165 Township Line Road, Jenkintown, PA 19046-3599, 6 January 2006

88. Weggel, J.R. “Ocean County Digester Cover: Circumstances Leading to Failure,” prepared for RAC Contractors, Inc., 4 Ridge Road, Southampton, NJ 08088 29 September 2005.

89. Weggel, J.R. "The Effect of the Proposed *Starlight Resort Hotel & Condominiums* on Wind Patterns and Coastal Processes, Wildwood, NJ," prepared for BMF Investments, LLC, 120 West Jefferson Avenue, Wildwood Crest, NJ 08260, 3 March 2006
90. Weggel, J.R. "Wind and Ship Waves at the Summit North Marina, Chesapeake and Delaware Canal, DE," prepared for Harold W. Schneikert, Jr., 724 Greenhill Avenue Wilmington, DE 19805-2854, 3 May 2006
91. Weggel, J.R. "Design of Shore Protection for Little Deal Island, MD," prepared for Gannett-Fleming, Inc. Seton Business Park 4701 Mount Hope Drive, Suite A Baltimore, MD 21215, 3 June 2006
92. Weggel, J.R. "The Effect of the Proposed *East Bennett Avenue Condo/Hotel* on Wind Patterns and Coastal Processes, Wildwood, NJ," prepared for Wildwood Walk Associates, 31-11 Broadway, Fairlawn, NJ 07410, 20 March 2006
93. Weggel, J.R. "Preliminary Evaluation – FEMA V-Zone Determination, American Inn and Matador Motels, North Wildwood, NJ," prepared for Mr. Don Steffieri, *American Inn* Motel, 510 East 13th Avenue, North Wildwood, NJ, 16 February 2006
94. Weggel, J.R. (2007) "Storm Drain Outfall Design, Lower Township, New Jersey," prepared for Hatch Mott MacDonald, 833 Route 9 North, Cape May Court House, NJ, 13 August 2007.
95. Weggel, J.R. (2007) "Interim Report, Bottom Sediment Mobilization by the *Doris Hamlin*, 23 January 2004," prepared for S.T. Hudson Engineers, Inc. 840 Cooper Street, Camden, NJ, 25 July 2007.
96. Weggel, J.R. (2007) 'Coastal Flooding and Velocity Zone Analysis, Asbury Park Boundary to Ocean Pathway, Ocean Grove, Neptune Township, New Jersey,' prepared for Wesley Atlantic Village Enterprise, LLC, Ocean Grove, Township of Neptune, Monmouth County, NJ, 26 June 2007
97. Weggel, J.R. (2007) 'Supplement to Coastal Flooding and Velocity Zone Analysis, Asbury Park Boundary to Ocean Pathway, Ocean Grove, Neptune Township, New Jersey,' prepared for Wesley Atlantic Village Enterprise, LLC, Ocean Grove, Township of Neptune, Monmouth County, NJ, 20 August 2007

98. Weggel, J.R. (2007) "Flood Hazard Analysis for Proposed Development on Venice Island, Manayunk, Philadelphia, PA, Second Supplementary Report, prepared for Stephen Varenhorst Architects, 1100 East Hector Street, Suite 313, Conshohocken, PA, 3 March 2007.
99. Weggel, J.R. (2007) "Application for Letter of Map Revision (LOMR), Appendix I, Venice One Analysis Results," prepared for Stephen Varenhorst Architects, 1100 East Hector Street, Suite 313, Conshohocken, PA, 15 June 2007.
100. Weggel, J.R. & J. Martin (2006) "Seawall Improvement, Goldschmidt Property, 95 Inlet Drive, Block 5.10, Lot 1, Avalon, NJ 08202, letter report prepared for Graham, Curtis and Sheridan, 4 Headquarters Plaza, Morristown, NJ 07962, 11 September 2006.
101. Weggel, J.R. (2007) "Paradise Park, NJ, FEMA Regulations and Flood Damage Prevention Ordinance, O-99-11, Highlands, NJ." letter report prepared for William Eaton, Esq., Korona, Biedes & Eaton, LLC, 40 First Avenue, P.O. Box 525, Atlantic Highlands, NJ 07716-0525, 2 January 2007.
102. Weggel, J.R. (2007) "Evaluation of Beach and Dune Conditions at 4003 South Long Beach Boulevard, Holgate, Long Beach Island, New Jersey (Tax Block 1.49, Tax Lot 4 - O'Sullivan Property)," prepared for Ballard, Spahr, Andrews & Ingersoll, LLP, Plaza 1000, Suite 500, Main Street, Voorhees, NJ, 17 April 2007.
103. Weggel, J.R. (2007) "Evaluation of Beach and Dune Conditions at 5905 Ocean Boulevard, Brant Beach, Long Beach Island, New Jersey (Tax Block 15.46, Lot 3 - Mastrocola Property)," prepared for Ballard, Spahr, Andrews & Ingersoll, LLP, Plaza 1000, Suite 500, Main Street, Voorhees, NJ, 23 April 2007.
104. Weggel, J.R. (2007) "Evaluation of Beach and Dune Conditions at 19th Street and the Boardwalk, Ocean City, New Jersey, (Block 1901, Lots 8, 8.01 & 10 - Schilling Estate)," prepared for Ballard, Spahr, Andrews & Ingersoll, LLP, Plaza 1000, Suite 500, Main Street, Voorhees, NJ, 4 February 2007
105. Weggel, J.R. (2006) "Drainage Conditions at 1414 Ponds Edge Road, Westtown Township, West Chester, PA," letter report prepared for Mr. Earl Hill, 1414 Ponds Edge Road, West Chester, PA 19382, 26 October 2006.

106. Weggel, J.R. (2006) "Trends in Shipping, Dredging Technology and in Wharf and Pier Construction in the Years Surrounding 1905 with Emphasis on the Delaware River and Bay," prepared for the State of New Jersey, Office of the Attorney General, Division of Law, 25 Market Street, Trenton, NJ, 26 October 2006.
107. Weggel, J.R. (2007) "The Impact of M & M Quarry Operations on Telford Borough Authority's Water Supply Well #4 and Nearby Private Water Supply Wells," prepared for Post & Schell, Attorneys at Law, Four Penn Center, 1600 John F. Kennedy Boulevard, Philadelphia, PA 19103, 28 March 2007.
108. Weggel, J.R. (2006) "Analysis of the 28 June 2006 Flood at R & S Import Motors, Fort Washington, PA," prepared for White & Williams LLP, One Liberty Place, Suite 1800, Philadelphia, PA 19103, 28 September 2006.
109. Weggel, J.R. (2008) "The Effect of a Proposed Bulkhead on a Restored Wetland at Block 127, Lot 507.01, North Wildwood, NJ, McKernan Property" prepared for J. Timothy Kernan, Inc. Kingsway Commons, Suite 100, 935 Kings Highway, Thorofare, NJ 08086, 19 April 2008
110. Weggel, J.R. (2008) "Shoaling and Circulation Improvement at the West End Boat Club Marina, Essington, PA" prepared for West End Boat Club, Essington, PA, 13 May 2008
111. Weggel, J.R. (2009) "An Investigation of the Feasibility of Moving the Dune Line Seaward between Jasper and Hayes Avenues in Strathmere, Upper Township, Cape May County, New Jersey," prepared for Mr. Vincent Sansone and Ms. Bette Jean Yank, 8 November 2009.
112. Weggel, J.R. (2009) "The Cause of Flooding on Sunday, 2 August 2009 at the Condor Automotive Site in Dresher, PA." Prepared for Matthiesen, Wickert & Lehrer, S.C., Harford WI, 14 October, 2009.
11. Schuman property, Ocean City, NJ.
113. Weggel, J.R. (2010) "Review of Proposed New Revetment and Augmented "Revetment" Design at 325 Atlantic Boulevard, Ocean City, NJ," and "Second Review of Proposed New Revetment and Augmented 'Revetment' Design at 325 Atlantic Boulevard, Ocean City, NJ," letter reports prepared for Hyland Design Group, Ocean City, NJ, 5 May 2010.

123. Weggel, J.R. (2010) "Evaluation of Dune Conditions at 5 Beach Avenue, Villas, New Jersey, (Block 319, Lot 1.02 -Arena Property," prepared for Dr. Kathleen Arena, 5 Beach Avenue, Villas, NJ, 18 August 2010.
124. Weggel, J.R. (2008) "Conceptual Design of Two Alternative Shore Protection Schemes for Seabreeze, Fairfield Township, Cumberland County, New Jersey," prepared for Seabreeze Homeowners Association, Seabreeze, NJ, 14 September 2008
125. Weggel, J.R. (2008) "Breakwater Conceptual Design, Including Wave and Ice Analysis, Seaboard Landing Marina, Pennsgrove, NJ" prepared for: Seaboard Landing, L.L.C. 807 Bay Avenue, Somers Point, NJ 08224, 10 March 2008
126. Weggel, J.R. (2008) "Seaboard Landing Marina, Dredging Analysis," prepared for: Seaboard Landing, L.L.C. 807 Bay Avenue, Somers Point, NJ 08224, 10 March 2008.
- 127 Weggel, J.R (2008) "Sedimentation the Vicinity of Pier 25 North, City of Philadelphia" letter report prepared for Marathon Engineering & Environmental Services, Inc., Swedesboro, New Jersey 08085, 25 January 2008
128. Weggel, J.R. (2008) "Wave and Water Level Climate at the Snug Harbor Marina Site, Cape May Harbor, Cape May, New Jersey," prepared for J. Timothy Kernan, Inc., Thorofare, NJ 08086, 3 November 2008
129. Weggel, J.R. (2009) "Bulkhead on Property at 40 Waterway Road, Ocean City, NJ," letter report prepared for Mr. Michael Lorenz, Cherry Hill, NJ 08002, 14 August 2009
130. Weggel, J.R. (2009) "Fort Washington Volvo, Claim #CMINT1036028" letter report prepared for Matthiesen, Wickert & Lehrer, S.C., Hartford, WI 53027-0670, 20 October 2009.
131. Weggel, J.R (2013) "Shore Protection Evaluation and Recommendation at 47 Bay Breeze Drive, Toms River, NJ, Block 295, Lot 1, Calderon Property," report prepared for Dr. Dawn Calderon, Toms River, NJ, 30 September 2013.
132. Weggel, J.R (2013) "Structural Modification of the 11th Avenue Groin at Longport, NJ, report prepared for the Borough of Longport, NJ, 23 October 2013.

INVITED LECTURES:

- Lehigh University
- University of Illinois
- University of Florida
- University of Maryland
- University of Delaware
- Old Dominion University
- Rowan University
- Marine Board, National Academy of Sciences
- US Army, Coastal Engineering Research Board
- Widener University
- University of Pennsylvania
- Temple University
- ASCE Geo Institute: Coastal Processes – March 2006.
- Drexel University, CAEE Seminar Series – “Sand Transport by Wind and Predicting Rates of Dune Growth”
- Nicholas Kraus Symposium, Melbourne, FL
- Polytechnic University of Madrid, Spain – five lectures on various aspects of sea level rise, June 2010
- Alumni Lecture, Department of Civil, Architectural & Environmental Engineering, Drexel University – 3 May 2012

SHORT COURSES PRESENTED:

- Coastal Structures - American Society of Civil Engineers
- Coastal Engineering Workshop - Drexel University
- An Introduction to Coastal Engineering for Non-Engineers - Coastal Zone '89
- Coastal and Dredging Applications of Geotextile Tubes – Geosynthetics 2007 Conference, Washington, DC, 15 January 2007.
- Coastal and Dredging Applications of Geotextile Tubes – GeoAmericas 2008 Conference, Cancun, Mexico, 2 March 2008.
- Ethics – ASCE Coastal, Oceans, Ports & Rivers Institute Congress, Memphis, TN, November 2010
- Ethics Workshop – The Philadelphia Engineers Club, 23 April 2013.

tab 5

tab 6

D'AMATO LAW FIRM

2900 Fire Road, Suite 200
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609-926-3300

Attorneys for Plaintiff

SANDRA SMITH, INDIVIDUALLY AND AS
EXECUTRIX OF THE ESTATE OF GEORGE
BRADLEY SMITH, AND AS GUARDIAN
AD LITEM FOR HER CHILDREN KOLE
SMITH AND BRANDY SMITH, NICOLE
GAETA, KYLE SMITH;

Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF
NEW JERSEY;

Defendants.

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION-CAPE MAY COUNTY
DOCKET NUMBER: L-

Civil Action

**CERTIFICATION OF
J. RICHARD WEGGEL, Ph.D., P.E., D.CE**

I, J. Richard Weggel, Ph. D., P.E., D.CE, of full age, hereby certify the following:

1. In the event that a hearing is scheduled and I am asked to appear in Court to provide testimony in support of this Order to Show Cause, I shall utilize the attached aerial photographs in support of my testimony.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



J. Richard Weggel

Dated: 30 Sept., 2016

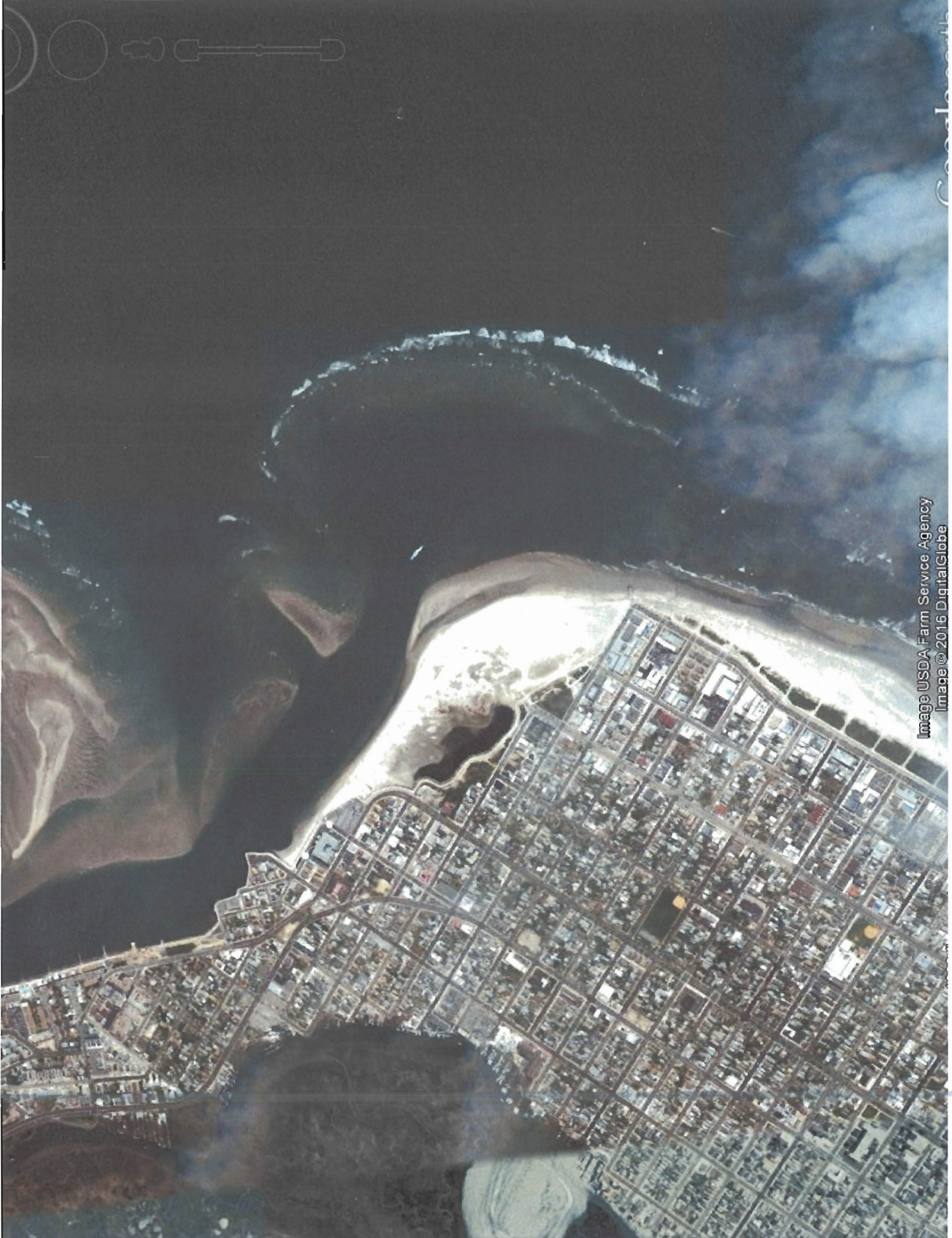
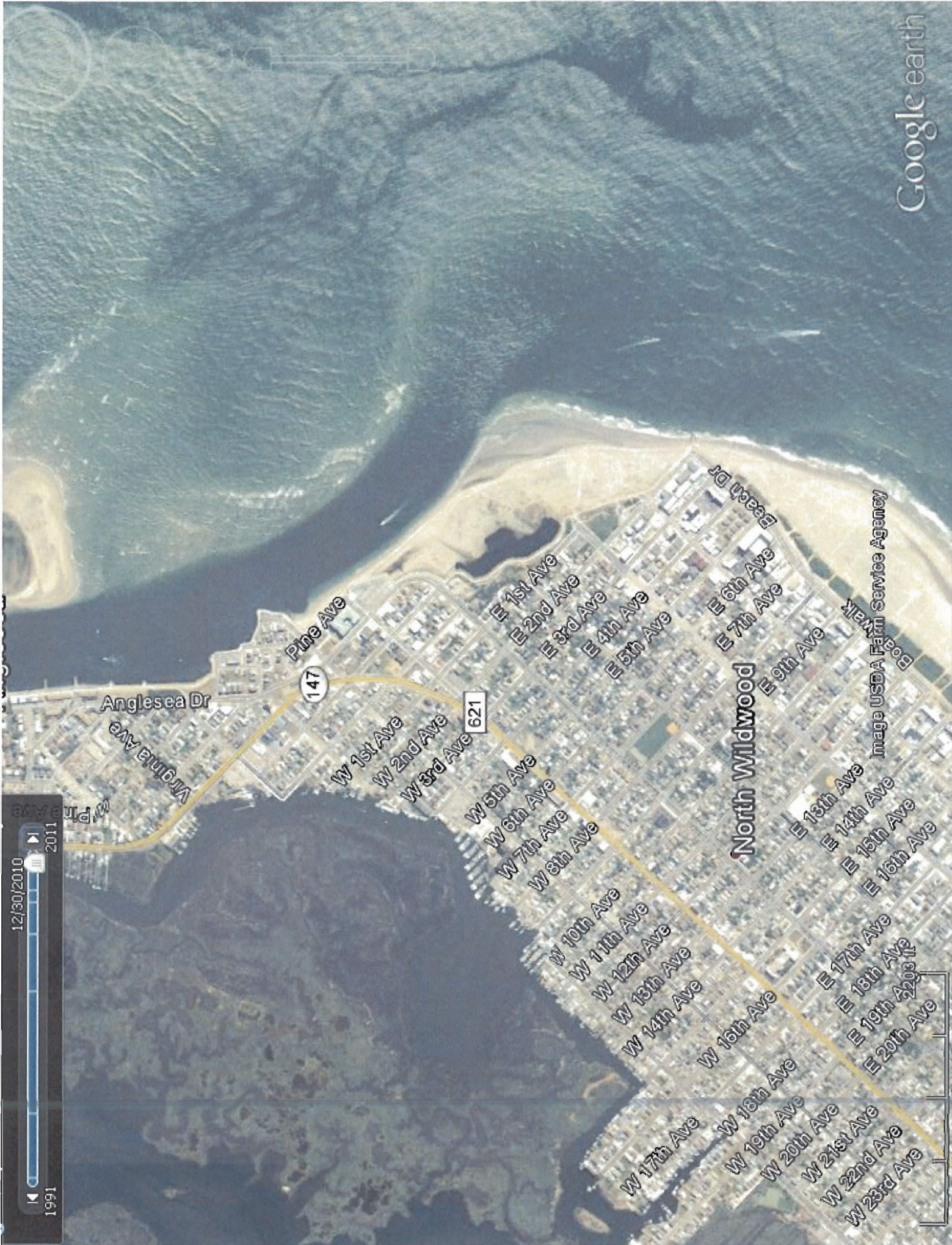


Image USDA Farm Service Agency
Image © 2016 DigitalGlobe



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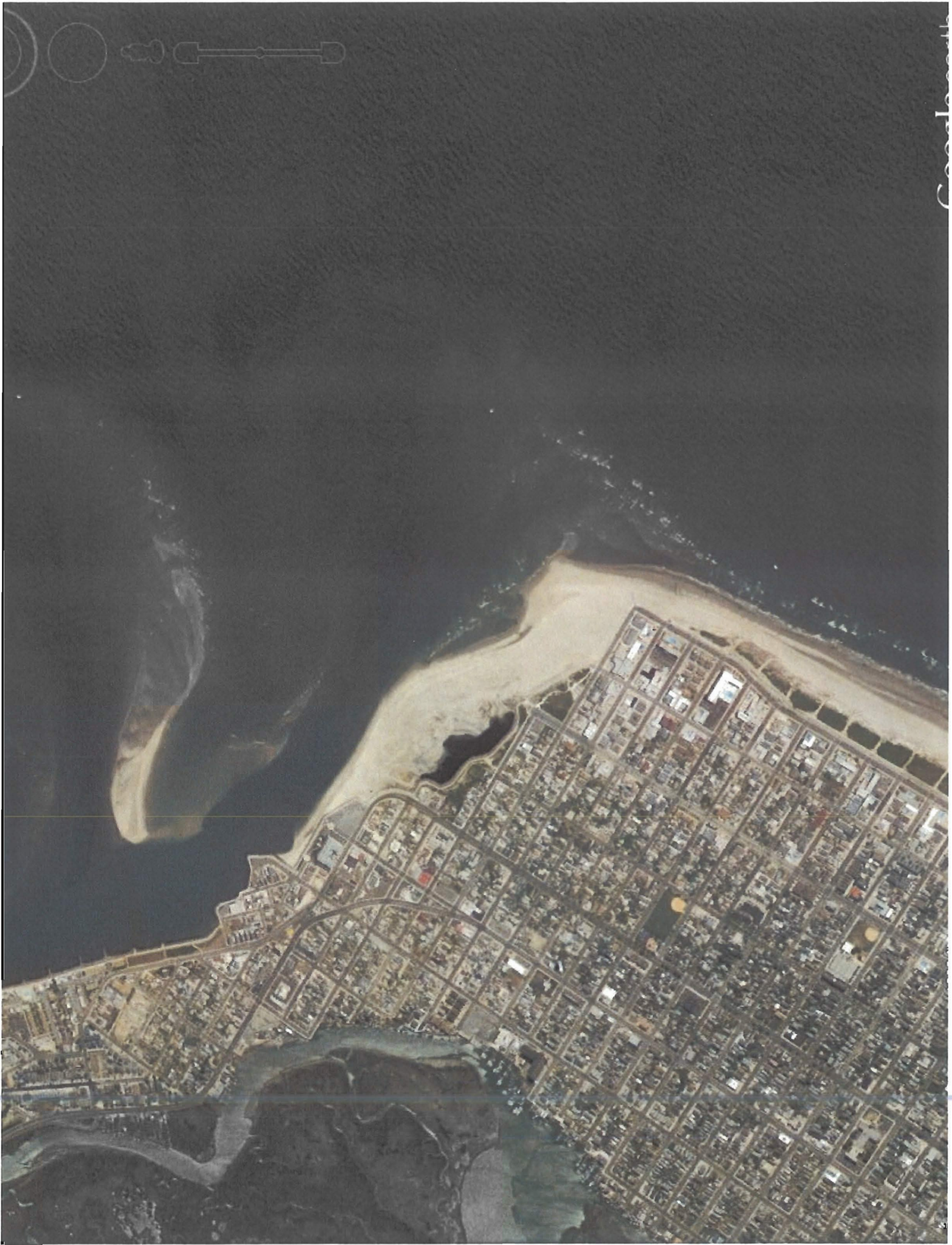
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tab 7

D'AMATO LAW FIRM

2900 Fire Road, Suite 200
Egg Harbor Township, New Jersey 08234
609-926-3300
Attorneys for Plaintiff

SANDRA SMITH, INDIVIDUALLY AND AS EXECUTRIX OF THE ESTATE OF GEORGE BRADLEY SMITH, AND AS GUARDIAN AD LITEM FOR HER CHILDREN KOLE SMITH AND BRANDY SMITH, NICOLE GAETA, KYLE SMITH;

Plaintiffs,

-vs-

CITY OF NORTH WILDWOOD, STATE OF NEW JERSEY;

Defendants.

**SUPERIOR COURT OF NEW JERSEY
LAW DIVISION-CAPE MAY COUNTY
DOCKET NUMBER: L-**

Civil Action

**CERTIFICATION OF
MICHAEL C. MASLOWSKI**

I, Michael C. Maslowski, of full age, hereby certified the following:

1. I am a retired New Jersey State Police Trooper 1.
2. I was a member of the New Jersey State Police for 25 years,
3. I was trained in Marine Law Enforcement by the New Jersey State Police.
4. I was previously assigned to the North Wildwood New Jersey State Police Marine Station.
5. I have received various advanced Marine Law Enforcement training.
6. I navigated and patrolled the area of Hereford Inlet for Approximately 10 years while I was a New Jersey State Trooper.
7. I have assisted the North Wildwood Police and the United States Coast Guard with several water rescues and drowning incidents in the area of the Inlet Beach.

8. There were approximately 2-3 rescues that I was personally involved in from the area of Hereford Inlet Beach each summer.

9. Beach Patrons swim and wade at the Inlet Beach during the summer months.

10. A short step off the inlet beach in the wrong direction could cause a person to fall into 30 feet of water.

11. There are several other beach rescues that go unreported each summer at the Inlet Beach.

12. The unreported rescues are performed by civilians utilizing Jet Skis and/or pleasure or fishing boats.

13. I and fellow State Troopers would hear about the rescues after the fact from beach patrons and other emergency rescue personnel.

14. I consider the Inlet Beach very dangerous to beach patrons due to extreme currents and beach erosion.

15. I have seen a vortex type whirlpool that forms near the rock wall at the Inlet Beach when the tides change.

16. I have personally been involved in several water rescues where individuals were caught in the vortex/whirlpool near the Inlet Beach rock wall.

17. I recall fishermen and tourists falling from the rock wall at Inlet Beach and getting sucked into the vortex/whirlpool.

18. I have observed the North Wildwood Police patrolling the Inlet Beach, Moore's Beach, Moore's Inlet Beach, and the Point on foot and ATVs.

19. I have been called by the North Wildwood Police to patrol in the Inlet Beach regarding jet skiers into the Inlet Beach.

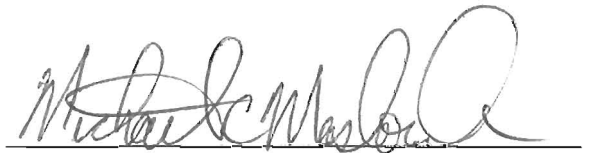
20. I would not allow my children to wade or swim at the Inlet Beach.

21. There is a drop off right off of the Inlet Beach and it is very dangerous to wade or swim.

22. Hereford Inlet is not charted for navigation by the Army Corp of Engineers because it is constantly changing and is dangerous.

23. I believe that the violent incoming/outgoing current from Hereford Inlet undermined the beach creating a pocket under Brad Smith's feet which collapsed.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.



Michael C. Maslowski

Dated: 9/28, 2016

tab 8

D'AMATO LAW FIRM

By: Paul R. D'Amato, Esquire - NJ ID# 006901974
Kasi M. Gifford, Esquire - NJ ID# 152582015

2900 Fire Road, Suite 200
Egg Harbor Township, New Jersey 08234
609-926-3300
Attorney for Plaintiff

**SANDRA SMITH, INDIVIDUALLY AND AS
EXECUTRIX OF THE ESTATE OF GEORGE
BRADLEY SMITH, AND AS GUARDIAN AD
LITEM FOR HER CHILDREN KOLE SMITH
AND BRANDY SMITH, NICOLE GAETA, KYLE
SMITH;**

Plaintiffs,

-vs-

**CITY OF NORTH WILDWOOD, STATE OF
NEW JERSEY;**

Defendants.

THUMB DRIVE
TABLE OF CONTENTS

1. Exhibit "A": Scott Sunderland's Depositions Transcript
2. Exhibit "B": Brandy Smith's Deposition Transcript
3. Exhibit "C": Chief Joseph Anthony ("Tony") Cavalier of the North Wildwood Beach Patrol's Deposition Transcript
4. Exhibit "D": Article from Shorenewstoday.com entitled "Guard Warns about Swimming in Inlet."
5. Exhibit "E": Lieutenant David Lindsay of the North Wildwood Beach Patrol's Deposition Transcript
6. Exhibit "F": The transcript of the recorded conversation between Mrs. Simpson and Lieutenant Lindsay
7. Exhibit "G": Select Sections of the Deposition Transcript of Louis Belasco.

D'AMATO
LAW FIRM

COUNSELORS AT LAW
A PROFESSIONAL CORPORATION

2900 Fire Road
Suite 200
Egg Harbor Township, NJ 08234

8. Exhibit "H": Select Sections of the Deposition Transcript of Carl Delinksi, Jr.
9. Exhibit "I": Select Sections of the Deposition Transcript of Chief Matthew Gallagher of the North Wildwood Police Department.
10. Exhibit "J": Mayor of North Wildwood, Patrick Rosenello's Deposition Transcript
11. Exhibit "K": Select Sections of the Deposition Transcript of Stephen DeHorse, Jr.
12. Exhibit "L": September 26, 2012, article from the Cape May County Herald.
13. Exhibit "M": The Hereford Inlet Light House Information Packet
14. Exhibit "N": December 17, 2013, report by the U.S. Army Corps of Engineers regarding the Hereford Inlet.
15. Exhibit "O": Certification of Michael C. Maslowski
16. Exhibit "P": North Wildwood New Jersey 2016 Information and Recreation Guide
17. Exhibit "Q": North Wildwood Police Department Investigation Report from July 13, 2009, regarding the Hart and Watkins drownings
18. Exhibit "R": The Deposition Transcript of Domonique McNeil.
19. Exhibit "S": USA Today article entitled "Things to do in North Wildwood, NJ."
20. Exhibit "T": The Certifications executed by Professor Weggel which include Report, Addendum Report, and Curriculum Vitae, as well as photographs which Professor Weggel will utilize if asked to testify at a hearing.

21. Exhibit "U": A photograph of the Unprotected Inlet Beach taken on June 16, 2014, depicting people utilizing the beach for sunbathing, walking, and playing in the water.
22. Exhibit "V": A photograph of people swimming in the water off of the Unprotected Inlet Beach
23. Exhibit "W": A photograph dated June 16, 2014, of adults and young children standing at the water's edge on the Unprotected Inlet Beach
24. Exhibit "X": A photograph dated June 16, 2014, depicting people sunbathing, fishing, running, and walking on the Unprotected Inlet Beach.
25. Exhibit "Y": A photograph of beachgoers on the Unprotected Inlet Beach
26. Exhibit "Z": An Excerpt from The Press of Atlantic City dated September 27, 2016, entitled "A Great Day for a Seawall Stroll." The picture is described as depicting, "Fishermen line the beach at Hereford Inlet adjacent to the seawall at New York Avenue."
27. Exhibit "A-1-A-14": Still photographs captured by drone of the Hereford Inlet on July 31, 2014
28. Exhibit "B-1": Video captured by drone of the Hereford Inlet on July 31, 2014
29. Exhibit "C-1": Photographs provided by the Cape May County Planning Department depicting the aerial views of the Hereford Inlet from 1920 to February 22, 2013.
30. Exhibit "D-1-D-243: Aerial Photographs taken from Helicopter over the Hereford Inlet on March 1, 2016

31. Exhibit "E-1": A photograph illustrating two City of North Wildwood Police Officers Patrolling the beach on June 20, 2014
32. Exhibit "F-1": A photograph illustrating City of North Wildwood Public Works employees working on the Inlet Beach on June 20, 2014.
33. Exhibit "G-1": rescue/drowning reports for the years 2010-2015 comprised of data compliments of North Wildwood Police Department, North Wildwood Beach Patrol., and North Wildwood Fire Department.
34. Exhibit "H-1": North Wildwood Resolutions designating the Lifeguard Protected Beaches from the years 2004 to 2011.