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STATE OF SOUTH CAROLINA

IN THE SUPREME COURT

S.C. SUPREME COURT

APPEAL FROM THE ADMINISTRATIVE LAW COURT

Ralph King Anderson, III, Administrative Law Judge

Docket No. 15-ALJ-07-0369-CC

Appellate Case No. 2019-000074

South Carolina Coastal Conservation League Appellant,

v.

South Carolina Department of Health and Environmental Control, KDP II, LLC,
and Kiawah Development Partners, II, ... Respondents.

RECORD ON APPEAL

VOLUME V OF IX

Amy E. Armstrong
South Carolina Environmental
Law Project
Post Office Box 1380
Pawleys Island, SC 29585
(843) 527-0078
Attorney for Appellant SCCCL

Bradley Churdar
S.C. Dept. of Health & Environmental
Control
1362 McMillan Avenue, Suite 400
Charleston, SC 29405
(843) 744-5838, ext. 112
Attorney for Respondent DHEC/OCRM

G. Trenholm Walker
Thomas P. Gressette, Jr.
Walker Gressette Freeman & Linton, LLC
P.O. Drawer 22167
Charleston, SC 29413
(843) 727-2208
Attorney for Respondent KDP, II, LLC and
Kiawah Development Partners, II

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1 THE COURT: There you go. We will.

2 (A break was taken from 10:24 a.m. until 10:34 a.m.)

3 THE COURT: All right. Mr. Walker, I think you were
4 up.

5 MR. WALKER: Thank you, Your Honor.

6 THE COURT: No, you can sit down if you want.

7 MR. EISER - CROSS-EXAMINATION BY MR. WALKER:

8 Q: Mr. Eiser, back in 2009 when we were both here,
9 you were opposed to the development of Captain
10 Sam's Spit with 50 houses, correct?

11 A: Yes.

12 Q: And you remain that way today, correct?

13 A: That is still my professional opinion, yes.

14 Q: I did not ask you your professional opinion.

15 A: All right. Am I personally opposed to it, is
16 that the distinction?

17 Q: Am I asking you, I asked you were you opposed to
18 it. You said yes. And I said are you still
19 opposed to it today. You're here today as an
20 individual, not an expert. Do you understand
21 that?

22 A: Yes.

23 Q: As an individual, are you still opposed to it?

24 A: Yes.

25 Q: You mentioned that you went out there last week,



1 was that at the request of Ms. Armstrong?

2 A: No.

3 Q: Was that to get ready for testifying here?

4 A: Yes.

5 Q: And you knew that you were testifying for Ms.
6 Armstrong's client, the Coastal Conservation
7 League, correct?

8 A: Yes.

9 Q: And you did not think you were being called to
10 hurt their case, did you?

11 A: No.

12 Q: You thought you were being called to help their
13 case, correct?

14 A: Yes.

15 Q: You mentioned public use when you went out
16 there. We heard some testimony about the facts
17 you gathered from the prior permit. When you
18 went out there previously for the prior permit,
19 which we've been into, you did not see a whole
20 lot of public access on the shoreline, did you?

21 A: I saw some, not a whole lot.

22 Q: Right. And, in fact, it was so infrequent that
23 it was basically minimal and that you did not
24 consider that that structure would adversely
25 affect public access, that it only had a minimal



1 effect?

2 A: I -- I think that was my testimony. Frankly, if
3 you -- if you have something that confirms that,
4 I would not dispute it.

5 Q: All right. I just have a note from your
6 testimony that it was -- that there might be
7 some minimal adverse effect on public access
8 that was not strong enough to bar the permit
9 from being issued.

10 A: That's correct.

11 Q: Thank you. Back to your personal views and your
12 prior testimony, your belief is that Captain
13 Sam's should be forever preserved in a natural
14 state without development?

15 A: Or at least developed in a way that is much less
16 impactful on the space.

17 Q: But before I understood that it was the 50
18 houses or any development on Captain Sam's, are
19 you here today saying personally you're okay
20 with some development on Captain Sam's?

21 A: I think some limited development that's in
22 character with the area could conceivably
23 happen, yes.

24 Q: All right, fair enough. You mentioned that
25 among your responsibilities with the Department



1 was to determine the baseline and setback line.

2 A: Yes.

3 Q: In fact, you were involved with that with regard
4 to Kiawah and the original baseline setting ---

5 A: Yes.

6 Q: --- were you not? And then in '99 or '98 or '99
7 ---

8 A: Yes.

9 Q: --- correct? And then in 2008, 2009?

10 A: Yes.

11 Q: Could we see that ... I'm going to show you
12 just a reference. If you'd go to the last page
13 of this, go to the very last page. Because I
14 want you to ---

15 **THE COURT:** Will you blow that up on here?

16 **MR. WALKER:** Yeah. Could you just get -- go to Bates
17 number 29 at the bottom, Dave.

18 Q: All right, if you'd blow up the bottom paragraph
19 and if you could see where it says the original
20 beach dune jurisdictional line. There you go.
21 So, would it be accurate to say that the
22 original beach dune jurisdictional baseline
23 drawn along the oceanfront portion of this
24 property, Captain Sam's Spit, in 1990 stopped in
25 the general vicinity of Beachwalker Park such



1 that all the land southwest of the park was
2 considered to be seaward of the baseline. That
3 was the baseline you helped set, correct?

4 A: Yes.

5 Q: And then when the beach dune baseline was
6 revised in 1999, in part by you, correct?

7 A: Yes.

8 Q: As part of the statewide line review process
9 mandated to occur every eight to ten years, the
10 baseline was extended approximately 4,600 feet
11 past the park down the oceanfront shoreline
12 towards the southwest, correct?

13 A: Yes.

14 Q: And that's, in fact, what happened?

15 A: Yes.

16 Q: And with that came the setting of the setback
17 line once the baseline was established, correct?

18 A: Yes.

19 Q: And the setback line was set 20 feet behind?

20 A: 20 feet landward, yes.

21 Q: Because there was no -- the erosion/accretion
22 factor was that it had accreted over 40 years
23 and not eroded, so it was not net eroding?

24 A: Right, that was a long term trend, yes.

25 Q: A long term trend was ---



1 A: Accretion.

2 Q: --- accretion. And you were the one who set the
3 setback line too, correct?

4 A: Yes.

5 Q: And the setback line is the line on the land
6 side where development can't possibly occur if
7 regulations are adhered to, correct?

8 A: I wouldn't say can't possibly occur. The
9 statute does allow for development on the ocean
10 side of the four-year setback line.

11 Q: I understand.

12 A: Okay.

13 Q: But I'm asking about on the land side of it.

14 A: Okay.

15 Q: I didn't mean -- and I may have misphrased my
16 question. So on the landward side of the
17 setback line is where development can occur?

18 A: It can occur, yes.

19 Q: Right. When you walked down to the end of the
20 point last week, did you see where the channel
21 cut was?

22 A: The channel cut from the most recent cut in ---

23 Q: Yes, in 2002.

24 A: Yes.

25 Q: That was a significant alteration to landscape,



1 was it not?

2 A: Yes.

3 Q: A big old -- the tip of the spit was severed
4 from the spit so that it could provide sand to
5 Seabrook, right?

6 A: Yes.

7 Q: And you as an oceanographer would know that when
8 that channel was put there at the new inlet,
9 there would be scouring on the sides, correct?

10 A: Yes.

11 Q: And you would expect there to be erosion as the
12 channel settled in the equilibrium, would you
13 not?

14 A: Yeah, I mean, that's a very dynamic area, so
15 either under natural or manmade perturbations,
16 there's always going to be some erosion there.

17 Q: But with the consent of my client, Seabrook was
18 allowed to move the inlet some 1,500 or 2,000
19 feet closer to Kiawah, correct?

20 A: That's correct, yes.

21 Q: And as a result of that, there was erosion on
22 part of the beach adjacent to where the new
23 inlet was located, correct?

24 A: I think you'd have to be specific about what
25 part of the beach, but, I mean, I would agree



1 that as Captain's Sam's inlet, as the channel
2 moves, there's going to be some erosion
3 somewhere.

4 Q: Right. And that inlet relocation was a
5 significant difference from the condition of the
6 spit back in 2008-2009 when we were here?

7 A: Yes.

8 Q: You've compared Captain Sam's Spit to Hunting
9 Island and Huntington ---

10 A: Huntington Beach State Park and Hunting Island
11 State Park. It's confusing because the names
12 are similar.

13 Q: Right. So Huntington Island State Park, down by
14 Fripp Island, correct?

15 A: Hunting Island State Park ---

16 Q: Hunting Island ---

17 A: --- in Beaufort County, yes.

18 Q: That's a state park; it's owned by the state?

19 A: Yes.

20 Q: It's not somebody's private property?

21 A: Correct.

22 Q: And, in fact, there are cabins and roads on
23 Hunting Island, correct?

24 A: Yes.

25 Q: So there's been development there?



1 A: Yeah, it's a very large island. You can get to
2 sections of beach where you don't see any
3 development.

4 Q: There has been development there?

5 A: Yes.

6 Q: And Huntington State Park also has roads,
7 correct?

8 A: Yes.

9 Q: And also has structures and development,
10 correct?

11 A: Yes.

12 Q: Ms. Armstrong asked you some questions about a
13 memo that you wrote. Do you still have that
14 memo in front of you?

15 A: Yes, I do.

16 Q: Did you refer to it in your testimony?

17 A: Yes.

18 Q: May I take a look at it?

19 A: Sure. If you'll just give me a second. Thanks.

20 Q: And one of the questions that you were asked
21 was, given the length and placement of the wall,
22 does the sheet pile wall seem to offer long-term
23 protection of the shoreline resulting in
24 stabilizing the area shoreline in order to
25 support residential development. And that was



1 question two, correct?

2 A: Yes.

3 Q: And your answer was, yes, assuming the wall is
4 properly designed and constructed, correct?

5 A: Yes.

6 **MR. WALKER:** I think that's all I have, Your Honor.

7 **THE COURT:** Mr. Churdar?

8 **MR. CHURDAR:** Your Honor, I don't have any cross for
9 Mr. Eiser.

10 **THE COURT:** Any re-direct on new issues?

11 **MS. ARMSTRONG:** Yes, a few.

12 **MR. EISER - RE-DIRECT EXAMINATION BY MS. ARMSTRONG:**

13 Q: Mr. Eiser, how would you describe Huntington
14 Beach State Park?

15 A: It's a state park that is a very large piece of
16 property that has some limited development, but
17 large portions of which are pristine and
18 undeveloped.

19 Q: And what -- residential development in the state
20 park?

21 A: No.

22 Q: Well, when you say some development, what do you
23 ---

24 A: Well, I'm sorry, are we talking about Huntington
25 Beach or Hunting Island?



1 Q: Huntington Beach State Park.

2 A: Okay. Huntington Beach State Park, no, there's
3 no residential development there.

4 Q: And do you have an idea of generally how long or
5 how big the beach is at Huntington Beach State
6 Park?

7 A: I would say it's over a mile long, probably
8 several miles.

9 Q: And on Hunting Island, are those ---

10 **THE COURT:** Wait a second, before you move to that
11 one. You said Huntington Beach State Park ---

12 A: In Georgetown County, yes, sir.

13 **THE COURT:** If it doesn't have residential
14 development, then what is the development,
15 commercial?

16 A: They have camp sites and restrooms, changing
17 areas.

18 **THE COURT:** Campsites in what regard?

19 A: So that people who want to spend a week there
20 can actually pull up with their trailer or tent
21 and spend a week.

22 **THE COURT:** Oh, so, it's not buildings or ---

23 A: No, sir, no.

24 **THE COURT:** Oh, okay.

25 A: I mean, there are some buildings that are close



1 to the beach so that people who are camping
2 there have restrooms and showers and whatnot.

3 **THE COURT:** Okay. Thanks.

4 Q: Are there any structures where somebody could go
5 in into a built structure and sleep?

6 A: No, not to my knowledge, no.

7 Q: And ---

8 **THE COURT:** You were moving to the next one when I
9 interrupted you.

10 **MS. ARMSTRONG:** Oh.

11 A: Hunting Island.

12 **THE COURT:** Yeah.

13 Q: So on Hunting Island State Park down in Beaufort
14 County, can you describe the nature of what you
15 -- Mr. Walker asked you about this development,
16 what is -- what do you mean by that?

17 A: Well, most portions of Hunting Island are very
18 similar to Huntington Beach State Park, but
19 Hunting Island is very erosional, so there have
20 been numerous beach renourishment projects
21 there. There are areas where what we'll call it
22 the maritime forest, the big trees are literally
23 right at the edge of the beach, and then at the
24 southern end of Hunting Island State Park, there
25 used to be several houses that were privately



1 owned. I think they leased the land from the
2 state park. I was never quite sure of the
3 ownership issue. But because of extreme erosion
4 at that end of the park, I think all but perhaps
5 one of those structures are now gone and the one
6 that's still there is uninhabitable because the
7 water has come up under it.

8 Q: And do you understand where -- or how would you
9 describe the location of Hunting Island State
10 Park?

11 A: You mean geographically?

12 Q: Yes.

13 A: It's in Beaufort County and as you come south
14 out of the City of Beaufort, you drive past
15 Harbor Island and then you get to Hunting Island
16 State Park, and if you continue driving, you
17 would get to Fripp Island.

18 Q: So what's north of Hunting Island? Describe the
19 water around Hunting Island, where is it, where
20 is it coming from?

21 A: Okay. Well, it's in the greater Beaufort area.
22 There's a small island immediately to the
23 northeast of Hunting Island that's called Harbor
24 Island. And there are, you know, large -- there
25 are large embayments in the Beaufort area, so



1 it's in that area.

2 Q: I guess what I'm getting at is do you know
3 whether Hunting Island is located on an inlet?

4 A: The ends of Hunting Island would be classified
5 as inlet zones for the purposes of drawing the
6 base line and setback line. There's different
7 methodologies based on whether or not you're in
8 an inlet zone. So, yes, both ends of that
9 island are on inlets.

10 Q: And when you were speaking about the structures
11 on Hunting Island that had been eroded and
12 washed away, were those in the inlet zone?

13 A: I don't know exactly where the boundary is. I
14 think some of those structures are far enough
15 towards Fripp that they would be in the inlet
16 zone, yes.

17 **MS. ARMSTRONG:** Your Honor, we have not unsealed the
18 deposition transcripts, the 30(b)(6) deposition
19 transcripts, but I saw that Mr. Walker was
20 asking Mr. Eiser questions about an exhibit that
21 was utilized in the deposition transcript, so
22 I'd like to break the seal and locate that
23 exhibit.

24 **THE COURT:** I changed my mind.

25 **MS. ARMSTRONG:** Pardon?



1 **THE COURT:** I'm just kidding.

2 **MS. ARMSTRONG:** The court reporter's watching me
3 closely to make sure I don't mess up.

4 **Q:** Bill, I'm going to hand you a full copy of the
5 document that is marked as Petitioner's Exhibit
6 Number Three, it was utilized in a 30(b)(6)
7 deponent deposition of the Department in this
8 case. I'd ask you if you are familiar with that
9 document?

10 **A:** Yes.

11 **Q:** Is that a document that you authored?

12 **A:** Yes.

13 **Q:** And what does this document reflect?

14 **A:** It's the critical area permit for the original
15 2008 bulkhead.

16 **Q:** And does this document contain the factual
17 considerations that you utilized in making the
18 decision with respect to the 2008 ---

19 **A:** Well, I might need to look at the document
20 again. All I saw was the permit. Thank you.
21 Yes, the first part of this document is the
22 actual permit and the second part of it is what
23 we call the technical summary of review, the
24 decision document.

25 **Q:** Does that embody your decision in the 2008



1 permit decision?

2 A: Yes.

3 **MOTION TO ADMIT PETITIONER'S EXHIBIT NUMBER 40:**

4 **MS. ARMSTRONG:** Your Honor, Petitioner moves Exhibit
5 -- well, let's mark it first.

6 **COURT REPORTER:** You pulled that out of the original
7 transcript, correct?

8 **MS. ARMSTRONG:** I did. I did.

9 **COURT REPORTER:** To keep that in tact, I would
10 prefer, and at The Court's direction ---

11 **MS. ARMSTRONG:** To make a copy?

12 **COURT REPORTER:** --- to make a copy of this before I
13 mark it again so that we can keep that ---

14 **THE COURT:** Yes.

15 **COURT REPORTER:** --- original in tact.

16 **MS. ARMSTRONG:** Okay.

17 **COURT REPORTER:** Do you want me to go make a copy
18 real quick or do you want me just to mark it at
19 the next break?

20 **THE COURT:** I'll get Harvin to go make a copy.

21 **MS. FAIR:** Is it just one page or all ---

22 **MS. ARMSTRONG:** The whole document. Thank you.

23 **MS. FAIR:** Front and back?

24 **MS. ARMSTRONG:** Yeah.

25 **THE COURT:** Let's just proceed. We'll address it.



1 I'll address the introduction later. There's no
2 need for us not to continue.

3 **MS. ARMSTRONG:** Oh, I was -- I have not very much on
4 re-direct, but I was having that exhibit marked
5 so I could move to introduce it.

6 **THE COURT:** Okay. Well, any objection to its
7 introduction?

8 **MR. WALKER:** We object. It's the decision in the
9 prior proceeding. I showed a portion of it that
10 dealt mainly or only with his involvement for
11 setting the base line that showed the history of
12 the setting of the base line, which he
13 acknowledged. I didn't go into any of the
14 permitting decision or the reasons for the
15 decision. I wanted to show when the base line
16 was extended and the distance of it, but I
17 didn't -- and he acknowledged that, but I did
18 not get into the substance of the document at
19 all. I was responding to his or at least
20 elaborating on his responsibility to set base
21 lines and setback lines. And we object for the
22 reasons we said earlier. I did not purposely
23 open the door by talking about the substance of
24 his decision that was in there. And so we
25 object for the same reasons we had before.



1 **THE COURT:** All right. Mr. Churdar? Okay. Any
2 response?

3 **MS. ARMSTRONG:** Sure, Your Honor. We -- the
4 petitioner did not introduce the document
5 because of the problems that Mr. Walker is now
6 raising, but he's the one who opened the door on
7 the document and started asking Mr. Eiser
8 questions about his decision in 2008. And not
9 only did he do that, he asked him -- he listed
10 opinions from Mr. Eiser about what effects he
11 looked at in making his 2008 decision. And so
12 in that regard, I think he not only opened the
13 door for the 2008 document to come in, but also
14 Mr. Eiser's opinions and conclusions related
15 thereto. I wrote down in my notes that he asked
16 him about the 2000 structure and its effects,
17 which requires a conclusion from Mr. Eiser, and
18 those conclusions are contained in the document
19 that he just testified that he authored.

20 **MR. WALKER:** That was in response to his observation.
21 He said -- he was talking about the public use
22 and his observations were for -- were that there
23 was minimal public use and this was to show that
24 his testimony has changed about his view,
25 personal view, of the public use. The other



1 reason I put it up there was simply to go into
2 his base line determination to get the exact
3 distance and refresh him on the exact distance
4 and base line determination. I didn't go into
5 the rest of the document. All I went is to
6 simple fact that said in 1999, the base line was
7 drawn 4,600 feet on the Captain Sam's, it had
8 not been there before.

9 **THE COURT:** So the document that you went into was
10 the ---

11 **MR. WALKER:** It was -- at the very bottom, and I was
12 just showing that portion of it, not introducing
13 the document.

14 **THE COURT:** Well, there is a rule of evidence that
15 sets forth when you offer a partial -- partial
16 section out of a document, the full section can
17 be offered in full or the full document. The
18 document can be offered in full, can it not?

19 **MR. WALKER:** I don't think it can in this instance.
20 If I basically refreshed his recollection with
21 that aspect of the document, I don't think the
22 whole document comes in.

23 **THE COURT:** What's the document being offered for,
24 the purposes?

25 **MS. ARMSTRONG:** Well, I think -- just backing up a



1 little bit, Ms. White's helping me look for the
2 rule, but that's our understanding also. If
3 only a portion ---

4 **THE COURT:** Well, still, yeah, I still want to know
5 what it's being offered for.

6 **MS. ARMSTRONG:** Because ---

7 **THE COURT:** Because it sounds irrelevant.

8 **MS. ARMSTRONG:** Because Mr. Eiser was asked about the
9 effects of the revetment wall that's contained
10 in the document. Also, I think Mr. Walker
11 mischaracterized Mr. Eiser's testimony with
12 regard to public use, which is also reflected in
13 the document. And I think his testimony here
14 today supports the notion that there's public
15 uses. And we can have him go through and
16 publish the document, but ---

17 **THE COURT:** Let me look at the rule on that.

18 **MR. WALKER:** Your Honor, it's Rule 106.

19 **THE COURT:** Thank you for saving me. The remainder,
20 I should have found that immediately. Which
21 ought in fairness, so I have to decide if it's
22 fair.

23 **MR. WALKER:** And we would say we only referred to the
24 part of the document related to the extension of
25 the base line in 2009 and if there's something



1 else responsive to that, it would come in for
2 that purpose.

3 **THE COURT:** Why would it be fair to introduce the
4 entire document?

5 **MS. ARMSTRONG:** Because Mr. Walker asked Mr. Eiser
6 about what the effects of -- what were -- about
7 the 2008 structure and its effects. He also
8 asked him -- tried to say that the witness was
9 giving inconsistent testimony about public use
10 and both of those things are contained in this
11 document and, in fairness, should be included
12 for The Court's consideration.

13 **THE COURT:** What aspects of this document would be
14 unfair?

15 **MR. WALKER:** Well, I think everything else dealing
16 with his application. If they have something in
17 there, the document doesn't even refer to public
18 -- say if they have something about public use
19 ---

20 **THE COURT:** Well, you took a component of the
21 document out and inserted it. I think it would
22 be certainly fair to introduce the entire
23 subsection of that. I don't have the document
24 in front of me, so I'm having to ---

25 **MR. WALKER:** Yeah, if in fairness the rest of the



1 discussion of the setting of the base line
2 should be introduced, we would agree with that.

3 **THE COURT:** Okay. Well, that's what I'm going -- I'm
4 going to introduce that or rule on that. So I'm
5 going to allow -- did you ask about setting the
6 base line at the time?

7 **MR. WALKER:** Yeah, I think it's the next to the last
8 page and that paragraph. I think it's Bates
9 number 29.

10 **THE COURT:** The entire section dealing with base
11 lines should come in. We may have to just --
12 what page number would that be?

13 **MR. WALKER:** Are there page numbers on the bottom
14 marked KDP something or -- there are not? I
15 think it's the next to the last page.

16 **THE COURT:** So it would be the entire section
17 starting with beachfront -- the beach
18 jurisdictional line history?

19 **MR. WALKER:** Yes.

20 **THE COURT:** Okay. Well, that's just -- I could just
21 introduce that -- or have this page introduced.

22 **MR. WALKER:** That would be fine with us because it
23 contains the entirety of what I asked him about.

24 **THE COURT:** Okay.

25 **MR. WALKER:** The subject.



1 **THE COURT:** Ms. Armstrong?

2 **MS. ARMSTRONG:** I mean, that's not obviously what we
3 were trying to move into evidence. He's already
4 testified about that. It's Mr. Walker cross-
5 examined him on it ---

6 **THE COURT:** Well, I ---

7 **MS. ARMSTRONG:** I'm talking specifically about the
8 areas, it's page three under IV, Environmental
9 Assessment. It talks about how he looked at
10 what the effects were of this structure, which
11 Mr. Walker asked him about. It's all contained
12 in that -- under IV(a), Environmental
13 Assessment. That section. It also talks about
14 ---

15 **THE COURT:** All right.

16 **MS. ARMSTRONG:** --- about ---

17 **THE COURT:** Wait, so I can keep up with you.

18 **MS. ARMSTRONG:** --- the shoreline.

19 **THE COURT:** He talked about -- you say in fairness,
20 the section on environmental assessment out to
21 be introduced?

22 **MS. ARMSTRONG:** Yes.

23 **THE COURT:** What page number is that?

24 **MS. ARMSTRONG:** It's at the -- on the bottom of mine
25 it's got like five zeros and a three.



1 THE COURT: Do you see that?

2 MS. ARMSTRONG: --- and it continues on to page five.

3 THE COURT: Well, can you put it up on the screen?

4 MS. ARMSTRONG: It starts here, that's page three --
5 did you want -- I don't know if you -- how you
6 ---

7 THE COURT: Hold on a second. Okay. We're there.
8 And then the next page?

9 MS. ARMSTRONG: Uh-huh.

10 THE COURT: So you just basically want the entire
11 section regarding environmental assessment put
12 in?

13 MS. ARMSTRONG: Correct, Your Honor.

14 THE COURT: All right. Mr. Walker?

15 MR. WALKER: I didn't ask any questions about the
16 environmental assessment. I asked the witness
17 on purpose about two things. One was the
18 extension of the base line and set back line in
19 19- -- excuse me, in 2000- -- in 1999. That was
20 one thing. And the other thing we talked about
21 was his prior visit where the -- he observed
22 minimal use ---

23 THE COURT: I remember that.

24 MR. WALKER: --- and I did -- because I had to refer
25 to his testimony where he before said there



1 might be some minimal adverse effect on public
2 access, and that was specifically in his
3 response or into the questioning today about his
4 characterization of plenty of access and even
5 said last time, he considered plenty of access
6 and here he didn't say that in the trial before.

7 **THE COURT:** Okay.

8 **MS. ARMSTRONG:** Yet he -- it's specific, in the
9 environmental assessment section talks about
10 public use. That's something that he
11 considered. It also talks about what are the
12 effect.

13 **THE COURT:** All right. You said where. Where does
14 it do that? You can use that highlight feature.
15 You want me to turn it on? There you go.

16 **(Off the record discussion)**

17 **MS. ARMSTRONG:** Your Honor, I think I -- I have two
18 arguments and one of them is on the public use.
19 And in this, in the document on page four, Mr.
20 Eiser notes that the public open spaces are
21 something that he had to identify. In other
22 words, like looked at published uses. If you go
23 to section V on page six, then ---

24 **THE COURT:** You can highlight it; I've got the
25 highlighter on.



1 **MS. ARMSTRONG:** Okay. I just can't, with this chair
2 in the way and it's a little bit difficult for
3 me to ---

4 **THE COURT:** Oh, oh, oh, I'm sorry. I wasn't even
5 thinking about that.

6 **MS. ARMSTRONG:** It's kind of hard for me to reach.
7 That's okay. I mean, it's easier for me to
8 point to this up here.

9 **THE COURT:** Okay. Okay.

10 **MS. ARMSTRONG:** I guess I can ---

11 **THE COURT:** Wait, you can leave it -- okay.

12 **MS. ARMSTRONG:** This section where it talks about how
13 it's continued use of a public recreational
14 facility supported by the open space provisions
15 in the Management Plan. So there's that aspect
16 of it that's talking about the public use and it
17 being an open space. And then the other part
18 was just -- the other part of my argument was
19 that he, Mr. Walker raised questions about the
20 2008 Department decision and asked him, before
21 getting to the beach line question, asked him
22 about determinations that he made with respect
23 to the effects of that project. And those are
24 all contained in the environmental assessment
25 and the 2008 permit and what Mr. Eiser



1 considered and what he did, and what he thought
2 the effects were, were not raised by -- on
3 cross-examination, then I wouldn't be seeking to
4 introduce this. But in all fairness, these are
5 things that we believe would properly come into
6 evidence under Rule 106.

7 **THE COURT:** Mr. Walker?

8 **MR. WALKER:** I think we have handled the base line,
9 so we're just talking about the public use.

10 **THE COURT:** Yeah.

11 **MR. WALKER:** The only part of his investigation that
12 I asked him about was the public use because he
13 testified that he went out and he saw the same
14 thing he did back in 2008, a lot of public use.
15 So I brought this testimony where he said that
16 there was minimal public use, but not enough to
17 deny the permit, which was the complete
18 sentence. I did not ask him about anything --
19 any other subject. I didn't ask about any of
20 these subjects in the document -- the two things
21 that she referred to, dune areas, public open
22 spaces, and barrier islands, is not the public
23 use of the riverbank. But when she gets down to
24 the other reference she had on the page under
25 VI, that the erosion control structure in this



1 location will protect and allow for the
2 continued use of the public recreational
3 facility and county park?

4 **THE COURT:** Yeah.

5 **MR. WALKER:** And I don't -- I think you could argue
6 that if that's to be included, it's to be
7 included because I raised public use of the
8 shoreline is what we're talking about. But that
9 I think is the only thing remotely related to
10 public use in this document.

11 **THE COURT:** Well, I'm going to let that in, so.

12 **MS. ARMSTRONG:** I'd just say, I mean, the whole
13 obviously public open spaces are related to
14 public use of those open spaces. So I don't
15 know how else you'd get around that being
16 related to public use.

17 **THE COURT:** Well, that section had a lot more than
18 public spaces. It had -- well, you've pulled it
19 off now, but what I was seeing had a lot more
20 than just what you just referenced. Did it not?

21 **MS. ARMSTRONG:** There -- I mean, we can do a -- you
22 know, a strike-out, I suppose, of everything
23 that didn't include that, but, again, more
24 broadly, the effects of the revetment structure
25 were raised on cross.



1 **MR. WALKER:** I only asked about the public use of the
2 shoreline.

3 **THE COURT:** I understand that.

4 **MR. WALKER:** And that was it because his testimony
5 was inconsistent and to read the inconsistent
6 statement, that was in his sentence. I did not
7 get into ---

8 **THE COURT:** Well, I'll allow anything -- and if we
9 can just, before you rest, if we could get this
10 document redacted in some way. What we might
11 have to do is make another copy of it. And so
12 that -- because I'll allow anything in regarding
13 public use.

14 **MS. ARMSTRONG:** Your Honor ---

15 **THE COURT:** Mr. Walker referred to, I get that, but
16 -- it says, which in fairness, and I think in
17 fairness would be anything that references that
18 which he discussed. But I don't want to go
19 outside of that.

20 **MS. ARMSTRONG:** Your Honor, I'm going to move the
21 whole exhibit in.

22 **THE COURT:** I figured you would, that's why I said we
23 ought to make another copy of it, so if you want
24 to proffer it, is what you're getting at?

25 **MS. ARMSTRONG:** No, I'd like to move it into evidence



1 as an admission of a party opponent with respect
2 to the effects of a structure along the
3 shoreline of the Kiawah River and the
4 cumulative, long range and cumulative effects
5 and the general character of the area with
6 respect to a erosion control structure along the
7 banks of the Kiawah River.

8 **MR. WALKER:** It is not an admission of a party
9 opponent in this case on these facts. It's a
10 separate case and she is just doing -- or the
11 petitioner is doing what we went through
12 earlier, she's trying to use what went on in
13 that case as having being more or less probative
14 of some fact in this case. This is a de novo
15 hearing. That was a determination that was
16 made, we tried that case. It's been up on
17 appeal. It's on the second appeal. It's not
18 more or less probative of anything in this case.
19 And how they applied it then for a different
20 permit application with a different board is not
21 probative in this de novo proceeding as to
22 whether the Department properly issued the
23 permit based upon the facts applicable to this
24 different permit application ---

25 **THE COURT:** Well, let me stop you there. If the



1 Department is taking a position as to a factual
2 viewpoint of this case and that document
3 reflects an adverse position as to what they
4 view the facts in this case, would that not be
5 an admission of a party opponent?

6 **MR. WALKER:** I don't think it's an admission of a
7 party opponent because I don't think it goes to
8 prove anything, any fact in this case. The
9 question is did they properly apply -- or you're
10 going to decide whether ---

11 **THE COURT:** Does it make them ---

12 **MR. WALKER:** --- this permit should be granted based
13 on ---

14 **THE COURT:** Let me stop you.

15 **MR. WALKER:** --- this application.

16 **THE COURT:** Does it make any factual determination?
17 Does that document -- because I haven't read it
18 entirely. Does it make a factual determination?

19 **MR. WALKER:** It is the opinion -- it's the ---

20 **THE COURT:** Wait a second. Can I stop both of you?
21 Is this document already in the record, Exhibit
22 Three?

23 **MS. ARMSTRONG:** It is. Well, it is as an exhibit to
24 a deposition transcript, does that -- if that is
25 ---



1 **THE COURT:** And that was admitted?

2 **MS. ARMSTRONG:** The deposition transcript was.

3 **THE COURT:** Is that the one though that he reserved
4 the right to object to? I thought I had it
5 solved.

6 **MS. ARMSTRONG:** Yes. I would like that to be the
7 assertion. Although I, you know, I'm not -- I
8 don't know, I guess maybe The Court does, there
9 were objections lodged during the deposition,
10 but not to any of the exhibits that were
11 utilized. If the -- I think the petitioner ---

12 **THE COURT:** Mr. Walker ---

13 **MS. ARMSTRONG:** --- would take the position that if
14 there ---

15 **THE COURT:** I knew you were going there, so I beat
16 you to it. Mr. Walker, you ---

17 **MR. WALKER:** All objections except as to the form of
18 the question are reserved. So we can still
19 object to relevance.

20 **THE COURT:** Okay. All right. Well, back to where I
21 was talking about then, are there any -- I'll
22 ask you now. Are there any factual admissions
23 made in this exhibit that you're offering?

24 **MS. ARMSTRONG:** There are.

25 **RULING OF THE COURT:**



1 **THE COURT:** What are they? See, we're just going to
2 have to -- I tell you what I'm going to do. I
3 want to keep moving on this. If we can get
4 together and just if you can iron out what you
5 believe to be factual admissions and then show
6 them to Mr. Walker during a break, and then at
7 least I could look at those factual admissions
8 rather than just sit here and speculate about
9 this, that, and the other, because it's
10 inefficient to do that.

11 **MS. ARMSTRONG:** I understand. I would suggest that
12 the admission of this document go under the
13 admission of a party opponent, goes a little bit
14 further than just the facts because this
15 decision went before the DHEC Board, the DHEC
16 Board passed on it, so it became the final
17 agency decision and the agency's position on how
18 it interprets regulations that I think are also
19 -- I mean, that's an admission of a party
20 defendant on how it applies a particular ---

21 **THE COURT:** Well, I would still need -- I would like
22 to know specifically where they did that, too,
23 because I don't want to just bounce around about
24 -- and not even know what I'm talking about. So
25 if we could just get -- let's just take this



1 issue, cull it out right now, and address it a
2 little bit later after a break.

3 **MS. ARMSTRONG:** That's ---

4 **THE COURT:** Okay?

5 **MS. ARMSTRONG:** Yeah, that's -- okay. That'd be
6 fine.

7 **THE COURT:** All right.

8 **MS. ARMSTRONG:** I think we might need a little bit of
9 a longer break if we're going to do something
10 like that.

11 **THE COURT:** Well, we can -- maybe y'all can go ahead
12 and rest when you get through and I can still
13 leave this open to do it at a later date. I
14 mean, I don't even have to do it today.

15 **MS. ARMSTRONG:** Yeah.

16 **THE COURT:** Is that what you're getting at?

17 **MS. ARMSTRONG:** We'll get -- yeah, I think let's aim
18 for today and see how far we get and we'll ---

19 **THE COURT:** I'll leave this open for any time until
20 I conclude the case, so.

21 **MS. ARMSTRONG:** Okay.

22 **THE COURT:** The more I think about it. I mean, this
23 is no rush.

24 **MS. ARMSTRONG:** All right.

25 **THE COURT:** All right.



1 **MS. ARMSTRONG:** Thank you, Your Honor. We don't have
2 any more questions for this witness. At this
3 point, Mr. Eiser is testifying under subpoena.
4 We request that he be released from the
5 subpoena.

6 **MR. CHURDAR:** No objection to that.

7 **MR. WALKER:** No objection, Your Honor.

8 **THE COURT:** You may step down and head on out.

9 A: Thank you, sir.

10 **(The witness was excused.)**

11 **MS. ARMSTRONG:** And at some point, we're probably
12 going to need more copies of Exhibit Three.
13 I've got the original, let me hand it back up
14 there so I don't hold onto the deposition
15 original.

16 **THE COURT:** Yeah, let's get that deposition back in
17 order before we ---

18 **MS. ARMSTRONG:** Yeah.

19 **THE COURT:** All right.

20 **(Off the record discussion.)**

21 **MS. ARMSTRONG:** All right. Your Honor, the
22 Petitioner calls Curtis Joyner to the witness
23 stand.

24 **THE COURT:** I thought he was off, but now he's back
25 on.



1 COURT REPORTER: Mr. Joyner, J-O-Y-N-E-R or J-O-I ---

2 MR. JOYNER: That's correct.

3 COURT REPORTER: J-O-Y. Do you solemnly swear the
4 testimony you're about to give in this matter is
5 the truth, the whole truth, and nothing but the
6 truth, so help you God?

7 MR. JOYNER: I do.

8 COURT REPORTER: Thank you.

9 THE COURT: Welcome back.

10 MR. JOYNER: I couldn't stay away.

11 MR. JOYNER - DIRECT EXAMINATION BY MS. ARMSTRONG:

12 Q: Good morning, Mr. Joyner.

13 A: Good morning.

14 Q: Where are you currently employed?

15 A: DHEC OCRM.

16 Q: Okay. And how long have you been employed at
17 DHEC OCRM?

18 A: 29 years and 200 days.

19 Q: It sounds like you might be getting close to ---

20 A: I am, I am.

21 Q: When is that?

22 A: Next June.

23 Q: And what have your various positions been? What
24 is your position right now?

25 A: Manager of Coastal Zone Consistency Section.



1 Q: And have you had different positions during your
2 tenure at the agency?

3 A: I have.

4 Q: What have those been?

5 A: Prior to this position, I was in the planning
6 section, which is now known as the Coastal
7 Services Division, as Coastal Projects Manager,
8 which was basically marine debris and grant
9 management kind of thing. And then prior to
10 that, I was Critical Area Permitting Section
11 Manager for eight years. And prior to that
12 Critical Care Project Manager. And then first
13 thing that I did was I used Bill's data to put
14 baselines and setback lines on our aerials at
15 the time.

16 Q: Okay. You're talking about Bill Eiser that just
17 ---

18 A: That's correct.

19 Q: Are you familiar with Captain Sam's Spit,
20 Curtis?

21 A: Yes.

22 Q: What do you know about its geographic history?

23 A: Well, that it's been attached to Kiawah Island
24 for most of its life and then it separated at
25 some point in the '40s. Geographic orientation



1 is southern Charleston County, about midway
2 between the Beaufort County -- or Colleton
3 County line and Charleston.

4 Q: And you mentioned that it had been breached
5 once. Are you aware of any other times ---

6 A: No.

7 Q: --- that it's been reattached?

8 A: No.

9 Q: Would you consider -- do you consider Captain
10 Sam's Spit to be dynamic?

11 A: Yes.

12 Q: Are you familiar with the environmental
13 inventory for Kiawah Island?

14 A: No.

15 Q: You've never heard of that document?

16 A: No.

17 Q: Do you know who Miles Hayes is?

18 A: I've heard the name.

19 Q: So are you aware that the Captain Sam's Spit has
20 breached and reformed and that's a cyclacle
21 process?

22 **MR. WALKER:** Object. Leading.

23 **MS. ARMSTRONG:** Your Honor, my understanding is I'm
24 allowed to lead a witness since he's an adverse
25 party.



1 **THE COURT:** You can ask that you can lead a witness
2 if he is an adverse party. Do you wish to ask
3 that?

4 **MS. ARMSTRONG:** I guess, please, Your Honor.

5 **THE COURT:** Well, any objection to that?

6 **MR. WALKER:** All right, Your Honor.

7 **THE COURT:** Okay. That request is granted.

8 A: Could you restate?

9 Q: Sure. Are you aware that the inlet -- that
10 Captain Sam's Spit has a cycle of breach and
11 reformation?

12 A: I am aware of one breach.

13 Q: So you don't know about other breaches that
14 occurred before the 1940s breach?

15 A: No.

16 Q: Do you know who Dr. Hayes is, Miles Hayes?

17 **MR. WALKER:** We've already asked and answered.

18 **MS. ARMSTRONG:** I'm sorry; I got a little ---

19 **MR. WALKER:** We're just ---

20 **MS. ARMSTRONG:** --- the objection got a little ---

21 **THE COURT:** That's the same ---

22 Q: If the Department determined in 2008 in its
23 critical area permit decision that Captain Sam's
24 Spit had breached and reformed several times in
25 recorded history, do you have any reason to



1 disagree with that determination?

2 A: No.

3 Q: And in 1949 when there was a breach, you agree
4 that there was absolutely no connection between
5 what we now know as Captain Sam's Spit and the
6 mainland of Kiawah Island, correct?

7 **MR. WALKER:** Objection. That is -- there's no proof
8 in the record to support that. That is facts
9 outside the record. There's no proof that in
10 1949 Captain Sam's Spit looks exactly like it
11 did today if it was separated and that was the
12 assumption in the question.

13 **THE COURT:** Do you want to rephrase it?

14 **MS. ARMSTRONG:** I mean, I think I'm -- I think when
15 we can do leading questions like that, I'm
16 allowed to ask him. He can certainly say no or
17 tell me he disagrees with the characterization
18 of the question. I mean, that's the whole
19 purpose of ---

20 **MR. WALKER:** A leading question is not a license to
21 misstate the record, Your Honor.

22 **THE COURT:** Yes.

23 Q: Mr. Joyner, what -- your knowledge of a complete
24 breach, what does that mean?

25 A: I recall early in my career when I was working



1 on the base line and setback line and air
2 photography at the time, the 1988 Beachfront
3 Management Act, instructed us to go back 40
4 years of historical data in the inlet zones and
5 that's what we did. We pulled a 1940s aerial
6 photograph, got it blown up, that's what I
7 recall seeing was a breach on that aerial
8 photograph.

9 **(Petitioner's Exhibit Number 5 was introduced into**
10 **the record at this time.)**

11 Q: Ms. White is putting up Petitioner's Exhibit
12 Number 5. Are you familiar with that document?

13 A: It's been a long time, but yes.

14 Q: Is that the document that you -- that the aerial
15 photograph that you looked at when you were
16 conducting that 40-year review?

17 A: I don't have any reason to dispute that it's
18 not.

19 Q: And when you talk about the breach, is that the
20 breach that you were talking about in the 1940s?

21 A: Yes.

22 Q: And you're aware that Captain Sam's Spit is in
23 the COBRA Zone?

24 A: Yes.

25 Q: What is COBRA?



1 A: Coastal Barrier Resource Act.

2 Q: And what does it mean if property is in the
3 COBRA Zone?

4 A: My understanding is they cannot -- the developer
5 cannot use federal funding for -- I believe it's
6 targeted towards infrastructure.

7 Q: And did you have any role in the 2008 permitting
8 decision that we've been discussing earlier?

9 A: I was manager of the section when it was
10 received. I was not manager of the section when
11 the decision was rendered.

12 Q: And did you play any role in the decision making
13 process for the 2008 permit?

14 A: No.

15 Q: But my understanding is you have played a role
16 with the Coastal Zone Consistency Certification
17 that we're here about today, is that correct?

18 A: Yes, as our indirect authority as a
19 certification of another permit.

20 Q: And Tara Maddocks at OCRM was originally
21 handling the review of this project?

22 A: That's correct. She was a project manager at
23 the time.

24 Q: And you took over as Project Manager from her?

25 A: I assumed it.



1 Q: You assumed it. And is Tara Maddocks still at
2 the agency at this time?

3 A: No, she's a at home mom.

4 Q: At the time that you assumed it, was she -- did
5 she have to leave to become who she --
6 pregnancy, birth, is that -- why did you take it
7 over from her?

8 A: No, she was still employed at the time.

9 Q: Okay. Ms. Maddocks -- this project was
10 unweilding, wasn't it, Mr. Joyner?

11 A: Yes.

12 Q: And there were a lot of different people
13 involved in the discussions about certifying
14 this project, weren't there?

15 A: I would say that were involved.

16 Q: There were a lot of people involved ---

17 A: Yes.

18 Q: --- in the decision? And is it your
19 understanding that Ms. Maddocks felt left out of
20 those discussions?

21 A: At times, but I did my best to keep her
22 informed. But things move quickly sometimes and
23 meetings occurred.

24 Q: And the meetings and discussions being made at
25 a higher level than Ms. Maddocks, correct?



1 A: Yes.

2 Q: And there was a lot of pressure put on the
3 agency in reviewing this certification decision,
4 wasn't there?

5 A: On the agency or -- yes.

6 Q: And it became particularly contentious with
7 respect to the Captain Sam's Spit development,
8 didn't it?

9 A: I guess so. Contentious with me -- is I'm
10 fairly calm, so I don't know that contentious
11 actually resonates with me, but I don't know.

12 Q: You knew that the applicant was told -- can I
13 have the exhibit that was on the screen when I
14 was examining Eiser? It's not there now.

15 **THE COURT:** Well, I promise I didn't take it.

16 **MS. ARMSTRONG:** Ah, here it is. Okay.

17 Q: Mr. Joyner, you were -- you knew that the
18 applicant was told in 2011 that the Department
19 wasn't going to review this project for long
20 range cumulative impacts, didn't you?

21 A: Not in -- not 2011, I did not.

22 Q: You -- I'm not asking about when you -- at what
23 point in time you knew, I'm asking did you know
24 that the applicant was told in 2011 that the
25 Department wasn't going to review?



1 A: I can only assume that based on what you just
2 put up on the display board.

3 Q: Curtis, I just want to ask you if you recall
4 this question when I took your deposition on
5 September 13 of 2016 on page 41, at line 16, I
6 asked you are you aware that the applicant was
7 told in 2011 that the Department was not going
8 to review its project for long range cumulative
9 impacts, and your answer was yes. Do you recall
10 giving that answer? Would you like to see the
11 ---

12 A: Sure. Which line was that?

13 Q: Page 41, line 16, I think, down in the bottom
14 right corner.

15 A: Okay. I think I became aware of it over time,
16 but in 2011, I was not aware of it.

17 Q: But you were aware that the applicant ---

18 A: Yes.

19 Q: --- this may have been some time later when you
20 actually took over review of the project?

21 A: Yes.

22 Q: The agency internally has had discussions about
23 how to handle that policy that requires
24 consideration of the long range cumulative
25 impacts of the project in the context of future



1 development and the general character of the
2 area, hasn't it?

3 A: Yes.

4 Q: And you've been involved in those discussions,
5 weren't you?

6 A: Not all the time.

7 Q: And who is Elizabeth Dieck?

8 A: She's our former Director of Environmental
9 Affairs based in Columbia.

10 Q: And Ms. Dieck was persuading you not to review
11 this project we're talking about today for long
12 range and cumulative impacts, wasn't she?

13 A: Yes.

14 Q: And it's your belief that Ms. Dieck had similar
15 conversations with staff based on your
16 discussions with other staff members, don't you?

17 A: Yes.

18 Q: And do you remember telling me that there was
19 external pressure from both Carolyn Bolton and
20 Elizabeth Dieck to be involved in the
21 certification ---

22 **OBJECTIONS:**

23 **MR. WALKER:** Objection, Your Honor. We've had a lot
24 of questions -- we're getting into the motive
25 thing again, pretty big. It's the motive for



1 the decision and she's putting the Department on
2 trial and how this all went, how it all happened
3 as opposed to what he did. And if The Court is
4 going to rule that the motives are not relevant
5 or who talked to whom about what and if there
6 was pressure, no pressure, because it's a de
7 novo hearing for you to decide applying the law,
8 then this is all irrelevant.

9 **MS. ARMSTRONG:** I disagree that it's irrelevant. I
10 mean, how the Department conducted its -- the
11 Department isn't on trial, the Department's
12 decision is. I mean, this is a review of the
13 Department's decision. Did it apply the law
14 properly. And if the Department is -- I think
15 what Mr. Joyner testified is that he heard from
16 Ms. Dieck that -- and from the DHEC Board that
17 they shouldn't be applying the regulations.
18 Basically, the Department -- there is evidence
19 that the Department's saying don't apply the law
20 here. And that's absolutely relevant.

21 **MR. WALKER:** It is -- it is not a direct appeal where
22 we're looking at what went on below and whether
23 -- how they handled it, if it was right or
24 wrong. They've appealed the permits, de novo
25 proceeding. Ms. Armstrong and her client can



1 come in and prove whatever they want about
2 cumulative impacts and this Court's going to
3 decide cumulative impacts based on the
4 application of the law. How they did it below
5 is not probative to you and how you're going to
6 apply it.

7 **THE COURT:** I agree with you, but there is one area
8 that I need to discuss, and that is -- although
9 that would be her -- if he is offering an
10 opinion as to this project, she can impeach him
11 on improper motives, can she not?

12 **MR. WALKER:** But she has not elicited any opinion yet
13 to impeach him on.

14 **THE COURT:** Yeah.

15 **MR. WALKER:** She's just going through what went on,
16 the drama, the soap opera, at DHEC. And the
17 soap opera is not what this case is about.

18 **THE COURT:** I agree with you on that. Do you get my
19 point and can you respond to it? I don't think
20 you can go into just simply motive per se, but
21 you can impeach a witness if the witness is
22 saying something for which -- because there's a
23 lot of latitude to impeach a witness, so.

24 **MS. ARMSTRONG:** So I guess two points, Your Honor.
25 First, the first point is that if what the



Department did and how it conducted its review and the things that it considered are not relevant, then why are even -- why do we even have agency staff testifying about what they did? I mean, these cases always -- if this Court's review is so de novo that it doesn't matter what was done before, why do we even have an agency making decisions and conducting some sort of review? I mean, the way agencies ---

THE COURT: I can stop you there. They make the decision because that is the first step in the process and then they come here to present their position as to why that decision is correct. So I hear their testimony as to their position as to why the decision is correct, for which you can impeach them as to their statements as to why their position was correct, whatever position they take. And they don't necessarily even have to -- I think to the extent they're controlled by the Department because -- matter of fact, that's probably -- I think that's a great example is the staff may have a certain position that they thought was correct, but when the Board determines what the position is of the Department, the staff comes over here and takes



1 the position of the Department, not their own.
2 And so it would not be proper to impeach the
3 Department's decision because the staff may
4 disagree with it.

5 **MS. ARMSTRONG:** I don't think I'm trying to ---

6 **THE COURT:** Well, I'm just ---

7 **MS. ARMSTRONG:** --- I think The Court just may be
8 misunderstanding ---

9 **THE COURT:** --- addressing the general subject
10 matter.

11 **MS. ARMSTRONG:** --- certainly, if we're talking about
12 the agency can put up evidence about why its
13 decision is correct, the petitioner can put up
14 its evidence about why the decision is not
15 correct.

16 **THE COURT:** That's not correct, correct.

17 **MS. ARMSTRONG:** And part of that includes that they
18 didn't follow the law. And so I'm -- I mean, I
19 think I'm presenting background evidence to
20 support our ultimate argument that the law
21 wasn't followed here.

22 **THE COURT:** Okay.

23 **MR. WALKER:** Your Honor, it's still a de novo ---

24 **THE COURT:** This is a moving target, but that's -- so
25 now it's switched.



1 **MR. WALKER:** No, it's still a de novo hearing. And
2 the way you put they didn't follow the law is
3 you put in the facts that pertain to the
4 application. You put in your facts about the
5 impacts; you put in your facts about any
6 technical challenge; you do all that and ---

7 **THE COURT:** Okay. Let me stop you just for one
8 moment. Is the Department going to put up any
9 witnesses in this case?

10 **MR. CHURDAR:** Well, the Department is going to be
11 cross-examining Mr. Joyner fairly extensively.
12 As far as the other witnesses, I have a motion
13 at the end of the petitioner's case for non-suit
14 as it relates to the actual permits, so I'm not
15 sure ---

16 **THE COURT:** Okay.

17 **MR. CHURDAR:** --- about the other witnesses.

18 **THE COURT:** All right. All right, now, Mr. Walker,
19 I just wanted to hear ---

20 **MR. WALKER:** No, well, and I just want to instead of
21 talking -- it may be helpful just to get down to
22 it. So, say let's -- all this questioning is
23 Ms. Armstrong is suggesting to The Court that
24 staff did not consider the full effect,
25 cumulative effects, say that's what she wants to



1 prove. Well, she cannot win here just by
2 showing staff didn't consider cumulative
3 effects. She has to show that they're adverse
4 cumulative effects ---

5 **THE COURT:** I agree with that.

6 **MR. WALKER:** --- in The Court. So it's not more or
7 less probative of any fact at issue. The fact
8 in this case is what are the cumulative effects
9 and the ---

10 **THE COURT:** Well, I'll put you back again, I said it
11 was a moving target, but it's the same area is
12 when she brings up her position, it's only in
13 the regards of impeaching a witness because that
14 is the only grounds for which she can be doing
15 this. So she is setting forth that this is a
16 proper means by which to impeach a witness.

17 **MR. WALKER:** But she has to have an affirmative
18 statement before she can impeach. What has Mr.
19 Joyner said that she's impeaching on? I mean,
20 that is -- you can't just start throwing stuff
21 at a witness to impeach a witness. There needs
22 to be a statement, specific time and place, and
23 then the person cross-examining says on a prior
24 date at such and such a time, did you not say
25 this, which is inconsistent. The witness says



1 that. She is not impeaching Mr. Joyner. She's
2 trying to develop facts that the Department
3 followed the law. She -- didn't follow the law.
4 There's no impeachment going on. She's just
5 developing this case theme about -- which we, of
6 course, we don't think we need to respond to ---

7 **RULING OF THE COURT:**

8 **THE COURT:** Okay. I think I get the point, but my
9 ruling is going to be that if you have any
10 questions related to failure to follow the
11 cumulative impact that relate to the decision
12 that Mr. Joyner made and not overall the
13 Department, because you're impeaching him,
14 either -- you called him, but you called him as
15 an adverse witness, then you can -- I'm going to
16 allow you to pursue that. In other words, I'm
17 going to void the soap -- general soap opera and
18 stay specifically with Mr. Joyner's decision
19 making process.

20 **MS. ARMSTRONG:** Okay. And I think what I was asking
21 him is -- I'm trying to elicit facts that were
22 in existence at the time that the decision was
23 made.

24 **THE COURT:** Well, you can go ahead and ask the
25 question.



1 **MS. ARMSTRONG:** I thought that's what I was asking
2 him, but I'll try and be more clear.

3 **Q:** I think we talked a little bit about your
4 conversation with Ms. Dieck. I want to -- did
5 Ms. Geddings, Rita Geddings, she's your -- is
6 she your immediate supervisor?

7 **A:** She was.

8 **Q:** She was. And she communicated to you that the
9 Board's direction was to not consider long range
10 and cumulative impacts, correct?

11 **MR. WALKER:** Same objection, Your Honor. That's not
12 impeaching anything. I think the way to impeach
13 would be, did you consider long range and
14 cumulative impacts and he could have said yes or
15 no. If he says yes, she can impeach him and say
16 no, you didn't. But she's just continuing to
17 get in this saga chapter by chapter of what went
18 on. That's not impeachment.

19 **THE COURT:** That's ---

20 **MS. ARMSTRONG:** I don't know that I'm trying to
21 impeach him. I'm trying to establish like the
22 facts that ---

23 **THE COURT:** Well, I don't understand what grounds you
24 can go into this. If you're not impeaching him,
25 there's ---



1 **MS. ARMSTRONG:** I'm going to show the basis of the
2 Department's decision and he's the person who
3 made the decision and what did he consider and
4 what influenced his decision; how did he make
5 that decision.

6 **THE COURT:** Well, then you're impeaching that
7 decision.

8 **MS. ARMSTRONG:** Well ---

9 **THE COURT:** I think a start would be ---

10 **MS. ARMSTRONG:** I mean, the ultimate decision
11 because, yeah, we're challenging the permit, so
12 we ---

13 **THE COURT:** Yeah.

14 **MS. ARMSTRONG:** --- think that they shouldn't have
15 been issued.

16 **THE COURT:** Give me -- I'm not doing this just
17 because Mr. Walker suggested it. It does make
18 a lot more fluid sense is ask him did he
19 consider the long range cumulative impacts and
20 then ask -- if he says yes, then we'll go down
21 that path; if he says no, you can ask him why
22 not. Would that make more logical sense here?

23 **MS. ARMSTRONG:** I mean, it may to Mr. Walker, but it
24 certainly doesn't to me make more sense.

25 **THE COURT:** Okay. Well, then proceed and we will



1 table it.

2 Q: When did you take over review for this
3 certification decision, Curtis?

4 A: Either late 2014 or early 2015.

5 Q: And did you -- how does the Department -- when
6 you ultimately made your decision, what does it
7 take the form of? Is there a written product?

8 A: Yes, routinely, we -- we generate what's called
9 a staff assessment much like critical areas
10 technical review document. Our staff assessment
11 is a little bit different than their's. We're
12 not referencing regulations; we reference
13 enforceable policies that are contained in the
14 Coastal Zone Management Program. So we list out
15 the policies and we -- we do an analysis on each
16 individual policy and render a decision at the
17 end and as part of that is a geographical
18 information system review, which is the GIS,
19 take in various data sets to make a decision.

20 **MS. ARMSTRONG:** I'm going to ask the court reporter
21 to mark Petitioner's Exhibit 40 -- is it 40 or
22 41? No, it's 41.

23 **COURT REPORTER:** Are we going to reserve 40 for this
24 document?

25 **MS. ARMSTRONG:** That would probably make sense.



1 THE COURT: Yes, if we could.

2 COURT REPORTER: So this would be 41.

3 (Petitioner's Exhibit Number 41 was marked for
4 identification purposes).

5 COURT REPORTER: And what is this?

6 MS. ARMSTRONG: The staff review summary ---

7 COURT REPORTER: Never mind, I'll write it down and
8 when you ---

9 MS. ARMSTRONG: How do we -- what do you -- I call it
10 the technical summary of review, but ---

11 MR. JOYNER: Staff assessment.

12 MS. ARMSTRONG: Staff assessment. Staff assessment.

13 COURT REPORTER: Thank you.

14 Q: I hand you what's been marked as Petitioner's
15 Exhibit Number 41. Is that the document that
16 you created, Curtis?

17 (Petitioner's Exhibit Number 41 was introduced into
18 the record at this time.)

19 A: Yes.

20 Q: What does this document reflect?

21 A: It's just a -- it's a summary of actions on the
22 consistency certification request and it's part
23 of the stormwater permit and a wastewater and
24 water supply permit, so it basically touches
25 upon or analyzes the enforcement policies that



1 we think are applicable to a project, so that's
2 sort of generally what we do.

3 Q: And this contains the Department's or your
4 conclusions regarding this certification
5 decision?

6 A: This is the staff assessment. It's not the
7 memo.

8 Q: And if we look under Section 7, the activities
9 in areas of special resource significance, that
10 first policy identifies barrier islands,
11 correct?

12 A: Yes.

13 Q: And Captain Sam's Spit is part of Kiawah Island,
14 which is a barrier island, is that correct?

15 A: That's correct.

16 Q: And they are recognized as dynamic and fragile
17 coastal resources, aren't they?

18 A: Correct.

19 Q: And you would consider Captain Sam's Spit a
20 fragile coastal resource, wouldn't you?

21 A: I'd consider it a coastal resource.

22 Q: Would you consider it fragile?

23 A: That word is used in the document.

24 Q: The policy also recognizes that barrier islands
25 are less stable and more prone to erosion than



1 areas that are not barrier islands, isn't that
2 true?

3 A: That's correct.

4 Q: And that would apply to Captain Sam's Spit in
5 Kiawah Island also, wouldn't it?

6 A: Correct.

7 Q: If you'd look up under C, guidelines for
8 evaluation of all projects. Under 7, you
9 recognize that there's going to be an impact
10 from the certification decision and that you're
11 going to be transforming a portion of the
12 pristine spit into a residential development,
13 correct?

14 A: Yes.

15 Q: And that's a cumulative impact, isn't it?

16 A: Yes.

17 Q: We were talking earlier about the dynamic nature
18 of the spit and it being breached. On the very
19 next page, on the second full paragraph, in this
20 decision document, you reflect the knowledge
21 that this spit has been constantly reshaped by
22 wave action, wind and littoral drift, didn't
23 you?

24 A: Yes.

25 Q: Now, before you actually submitted this staff



1 summary or review, was there some back and forth
2 about what those technical comments should
3 contain? Do you remember that?

4 A: Yes.

5 **MOTION TO ADMIT PETITIONER'S EXHIBIT NUMBER 41:**

6 **MS. ARMSTRONG:** Your Honor, I'd like to move
7 Petitioner's Exhibit Number 41 into evidence,
8 please.

9 **MR. WALKER:** No objection.

10 **MR. CHURDAR:** No objection, Your Honor.

11 **RULING OF THE COURT:**

12 **THE COURT:** It's admitted.

13 (Petitioner's Exhibit Number 41 was admitted into
14 evidence).

15 **MS. ARMSTRONG:** If I could ask the court reporter to
16 mark Petitioner's Exhibit 42.

17 (Petitioner's Exhibit Number 42 was marked for
18 identification purposes.)

19 Q: Can you reach them, Curtis?

20 A: Yeah.

21 Q: Long arms.

22 (Petitioner's Exhibit Number 42 was introduced into
23 the record at this time.)

24 Q: Looking over this document, Curtis, it's several
25 pages long. Does this look familiar to you?



1 A: It looks familiar to me in the sense that it's
2 an agency document, but I don't believe I was
3 the author.

4 Q: You don't believe you were the author?

5 A: Huh-uh.

6 Q: Did you draft the Coastal Zone Consistency
7 Certification portion of the document that you
8 were just looking at?

9 A: Yes.

10 Q: Did you provide an initial draft of these draft
11 technical comments?

12 A: No.

13 Q: If you flip over to the very last couple of
14 pages, what I see is a draft Coastal Zone
15 Consistency and Technical Review Comments for
16 Cape Charles Phase 1, 11/9/11 revised 11/18/11,
17 do you see where I'm looking at there?

18 A: Yes.

19 Q: Did you provide a draft -- is this familiar to
20 you?

21 A: No.

22 Q: So under the -- did you ever exchange any -- let
23 me back up a little bit. This document
24 indicates that there is a section addressing
25 activities in the areas of special resource



1 significance and the barrier island policies,
2 those are policies that you would have had to
3 apply in making your decision, weren't they?

4 A: Yes.

5 Q: But you didn't draft any of this language?

6 A: No. Yes, I did not because the date on it is
7 November of 2011 and I was still in Coastal
8 Services at that time. Coastal Services is a
9 non-regulatory component to OCRM. Not involved
10 in any way in any regulatory type decision.

11 Q: So have you seen these proposed -- Department's
12 proposed comments that we're looking at?

13 A: I may have glanced at them, you know, in 2015,
14 but did they raise any kind of, you know,
15 relevance to me, I don't recall.

16 Q: When was the last time that you were at Captain
17 Sam's Spit?

18 A: The day I missed the boat.

19 Q: Is that the day that I saw you in the parking
20 lot?

21 A: I believe so.

22 Q: And how many times have you been to Captain Sam's
23 Spit?

24 A: Over -- over my time at OCRM?

25 Q: During the time that you were reviewing this



1 project. Maybe -- let's broaden it to about the
2 past five years.

3 A: Three times maybe.

4 Q: And what have you done while you were there?

5 A: Walked the beach, walked a little bit of the
6 backside dune system along the Kiawah River,
7 stood in the parking lot.

8 Q: And were your visits there in connection with
9 your official role with OCRM or were they for
10 personal or private reasons?

11 A: Official role. However, as being manager, I
12 typically don't go on site visits and the
13 Coastal Zone Consistency Section really doesn't
14 do site visits even though Tara Maddock had been
15 out to this one.

16 Q: And on any of those occasions did you walk along
17 or view the banks of the Kiawah River, shoreline
18 where ---

19 A: Yes.

20 Q: --- the proposed project is going to be?

21 A: Yes, sorry.

22 Q: And what did you observe?

23 A: Kiawah River, spartina marsh on one side, you
24 know, a dune bank line on the other side, which
25 is the Captain Sam's Spit side, emerging



1 maritime forest on some parts of Captain Sam's
2 Spit, beachfront, and walked all the way around
3 to where the cut had been made.

4 Q: Did you observe -- have you ever been to Captain
5 Sam's Spit by way of Kiawah River?

6 A: Maybe once.

7 Q: And did you observe any people in the river in
8 and around the location of the proposed project
9 when you were on any of your visits in the past
10 five years?

11 A: Yes.

12 Q: And what were those people doing?

13 A: Recreating.

14 Q: Did you see anybody, any of those people, pull
15 up on the banks of the Kiawah River?

16 A: Not that I recall.

17 Q: Are you aware that the public does utilize the
18 banks of the Kiawah River?

19 A: I've heard testimony to that fact.

20 Q: I want to switch now to talking a little bit
21 more specifically about the general character of
22 the area. When you make a determination of the
23 general character of the area, do you make that
24 determination by going out on sites and looking
25 around?



1 A: We make a determination based on available
2 information in the office, so we see so many
3 projects for consistency with state and federal
4 actions, that we just don't have time to get out
5 to all of them. So do we take into account
6 general character of the area? Yes.

7 Q: I don't think that was answering my question,
8 but that's okay. I was asking how you make that
9 determination. But let me go down another path.
10 When you were in the Critical Area Section, did
11 you permit docks?

12 A: Yes.

13 Q: And you have to look at the area when you're
14 permitting a dock, isn't that correct?

15 A: The general character of the area, yes. It's
16 one of the ten general considerations that's
17 contained in the Critical Area regulations.

18 Q: And when you assess the general character of the
19 area in permitting a dock, you actually go out
20 on site to where that dock is and you look
21 around on the ground, isn't that correct?

22 A: Yes. It's been a while since I've been in
23 Critical Area. I don't know if they use more
24 in-office tools, but yes, that's what they do.

25 Q: And so the time limitations aside, actually



1 going to the site and looking around and seeing
2 what is there and what's visible is the best way
3 for the staff to determine what the general
4 character of the area is, isn't it?

5 A: Well, it is a good way. But I'm not going to
6 dismiss the, you know, the in-office tools that
7 we can use, like a GIS or the much maligned
8 Google Earth. Those are important, too.

9 Q: The Department utilizes Google Earth?

10 A: Not -- no, we do not. We use our Geographic
11 Information System, which is -- it has aerial
12 photography, it's just -- it's an ArcInfo
13 program.

14 Q: And does that program allow you to see what
15 things look like on the ground?

16 A: From an -- from a top-down view, yes.

17 Q: And you would agree that the general character
18 of Captain Sam's Spit is an undeveloped pristine
19 beach dune system, wouldn't you?

20 A: I think that's part of it.

21 Q: Would you agree that the general vicinity is a
22 completely natural and pristine area?

23 A: I think that's part of it. I think the general
24 vicinity takes more into account than just the
25 specific project site.



1 Q: What do you mean by that?

2 A: Well, I can't -- in a review of a certain area,
3 I can't discount an adjacent area. It's all
4 area generally.

5 Q: And, in fact, Ms. Dieck actually directed you to
6 look at the area very broadly, didn't she?

7 A: Well, she didn't have to because I would have
8 done it any way.

9 Q: And so how do you make the determination of what
10 the area is? Is there a set standard that you
11 use? Is it just case by case?

12 A: There's no set standard. You know, as we all --
13 for those of us who use and interact with the
14 enforceable policies, they're very broadly
15 written. I don't believe there's a definition
16 of how specific we need to be.

17 Q: So I'm just trying to understand how you would
18 make a good determination of what the area is
19 with respect to Captain Sam's Spit and a project
20 to build a 2,300 foot long steel sheet pile
21 wall, a road, and infrastructure associated with
22 26 residential lots on the spit, and ---

23 A: Well, I think I ---

24 Q: Go ahead.

25 A: I think I took my view much more broadly than



1 that. I also included parts of Seabrook and the
2 rest of Kiawah in our decision, in our analysis.

3 Q: And how did you determine that you should
4 consider Seabrook and the rest of Kiawah?

5 A: Well, Seabrook is immediately across the Kiawah
6 River from Captain Sam's Spit and Kiawah, parts
7 of it are directly connected, too. On the flip
8 side, I didn't take into account Myrtle Beach,
9 for example.

10 Q: Do you disagree with the determination made in
11 2008 that the general character of the spit is
12 undeveloped, pristine beach dune system and that
13 it's completely natural in pristine state?

14 A: I do not disagree with that assessment.

15 Q: And the Department's analysis in 2008, you
16 understand was limited to just Captain Sam's
17 Spit in making that determination, you agree
18 with that, right?

19 A: I've heard that testimony.

20 Q: Do you have any reason to disagree with that
21 scope of review in considering the general
22 character of the area being just Captain Sam's
23 Spit?

24 A: I would say I would not disagree or agree,
25 necessarily, because I wasn't in regulatory at



1 the time.

2 Q: If you walked out onto the spit today and you
3 looked around, you wouldn't see any development,
4 would you?

5 A: You might see a portion of Seabrook.

6 Q: If you looked around on the spit, it's in a
7 natural state, right? There's no development
8 out there?

9 A: Correct.

10 Q: In fact, you concluded that the character of the
11 area won't be changed if the applicant adheres
12 to conditions requiring selective clearance and
13 stormwater systems and natural dunes, didn't
14 you?

15 A: Yes.

16 Q: But there are going to be houses and a road and
17 lawns and driveways and cars and roofs and all
18 of that, too, aren't there?

19 A: True, but there will not be a wastewater
20 treatment plant.

21 Q: There's going to be a pump station, though,
22 right?

23 A: Yes.

24 Q: And once all of those houses and the road and
25 the lawns and the driveways and the cars are



1 built, the character of that area's going to be
2 changed, isn't it?

3 A: Yes.

4 Q: Do you agree that the sheet pile wall's going to
5 prevent shore line movement, don't you?

6 A: Yes.

7 Q: That sheet pile wall is going to affect the
8 ability of the inlet to migrate?

9 A: Yes.

10 Q: And that would be an impact, wouldn't it?

11 A: Yes.

12 Q: And as erosion continues along the river
13 shoreline, the wall's ultimately going to be
14 exposed and in a critical area, isn't it?

15 A: Yes.

16 Q: And at that point, the wall is going to change
17 the character of that area, isn't it?

18 A: Yes.

19 Q: And that would be a cumulative impact, wouldn't
20 it?

21 A: Yes.

22 Q: You believe that it's important to protect the
23 critical area, don't you?

24 A: Yes.

25 Q: I think you testified in your deposition that



1 your ultimate concern was protecting the
2 critical area, is that correct?

3 A: Yes, I -- and the reason that is is I believe
4 that the critical area is, as is our direct
5 authority is, more heightened, not to discount
6 what we do in consistency, but that's what I
7 believe.

8 Q: And what makes it so valuable or important to
9 protect?

10 A: Just the biological functions, the -- it's just
11 -- you know, it's a special resource for many,
12 many reasons. Filtering water quality, things
13 of that nature.

14 Q: Filter water quality, what other functions does
15 it play?

16 A: It's a habitat.

17 Q: Habitat for what?

18 A: Species, plants, animals.

19 Q: And are plants and animals and species, are
20 those coastal resources?

21 A: Yes.

22 Q: And is the Department -- do you consider coastal
23 resources when you're making decisions impacting
24 the coastal zone?

25 A: Yes, that is the core of what we do, is coastal



1 effects, yes.

2 Q: Is that something that you're required to
3 consider coastal resources pursuant to the
4 Coastal Zone Management Act?

5 A: I believe so.

6 Q: Curtis, do you know -- I can find my copy of the
7 Act, but might as well ask you since you're so
8 knowledgeable about the Coastal Zone Management
9 Act, if you know what section requires you to
10 consider coastal resources. Might be 48-39-20
11 ---

12 A: Yeah, I don't have a statute in front of me.

13 Q: Oh, you do?

14 A: I got working policies.

15 Q: Okay. I think it would be good for me to talk
16 about both. I'm going to hand you -- well,
17 actually, I'll just put it up on the screen so
18 we can all look at it. Before I take this image
19 down, Curtis, could you draw an approximate
20 circle around the area that you consider to be
21 the area when you were conducting your analysis
22 for cumulative impacts and the effects on the
23 general character for the area?

24 A: Well, the aerial's not large enough.

25 Q: So it extends beyond this aerial?



1 A: Yes.

2 Q: In looking at Section 48-39-20, under section
3 (B), do you see where the General Assembly finds
4 that increasing and competing under Section (B)
5 ---

6 A: Yes.

7 Q: --- is increasing and competing demands on the
8 lands and waters of our coastal zone occasioned
9 by population growth and economic development.
10 I'm going to skip down. These impacts that are
11 listed in detail have resulted in a decline for
12 loss of living marine resources, wildlife
13 nutrient-rich areas, permanent and adverse
14 changes to the ecological systems, and
15 decreasing public open space. So when the Act
16 talks about marine resources and wildlife, some
17 of those things that you're talking about, we
18 were talking about in coastal waters, those are
19 encompassed in that policy, is that your
20 understanding?

21 A: Well, I think it's referenced here in the
22 legislative findings. It is in the law, but
23 further plays out in program policies and even
24 so in the critical area regulations.

25 Q: I want to stick to probably the policies because



1 I think we probably would agree that the
2 critical area regulations don't apply to the
3 permits and certification issue, right?

4 A: That's correct.

5 Q: And are there any other things -- you were
6 talking about the resources that are contained,
7 the wildlife and living resources, that are
8 contained in the critical area that make it
9 valuable and important. What other -- can you
10 think of other values or functions or benefits
11 that warrant this heightened protection of
12 critical area that you've discussed?

13 A: Use.

14 Q: Is that ---

15 A: Public use.

16 Q: You're talking about public use?

17 A: Yeah. I mean I think public use is the ability
18 to use those areas as wetland areas as opposed
19 to what was going on at the time when the law
20 was written, which was the filling of critical
21 areas.

22 Q: Is it a concern to you that the wall, this sheet
23 pile wall's ultimately going to be in the
24 critical area that you're trying to protect and
25 maintain?



1 A: Is it a concern? I'll answer it this way. It's
2 not like any other critical area permit for a
3 bulkhead that's been issued by this agency for
4 the last 30 years, so they do occur. If it was
5 something that was prohibited, then, yes, it
6 would be very concerning.

7 Q: So you're only going to be concerned with
8 impacts to critical area if it's prohibited, but
9 if it's allowed, that doesn't cause you any
10 concern at all about walls for the resources
11 that we've been talking about?

12 MR. CHURDAR: Your Honor, I believe that what is
13 relevant here is the way that Mr. Joyner
14 answered it with regard to the application of
15 the law or the policies. I mean, just on a
16 personal basis, whether or not he's concerned
17 about something is not really relevant to the
18 Court's decision.

19 MS. ARMSTRONG: It's certainly relevant. He's the
20 person who made the decision and he has to look
21 at impacts that are flowing from the project.
22 If it's something that concerns him as a
23 potential impact, it's definitely relevant.

24 THE COURT: Well, is he not charged with considering
25 the concerns that he may have that are pursuant



1 to the law? I mean, isn't that ---

2 **MR. CHURDAR:** That's what I'm getting at.

3 **MS. ARMSTRONG:** And the law ---

4 **THE COURT:** He's addressing personal concerns. I
5 didn't really take the question to be that. I
6 thought she was more addressing his concerns
7 that he said if it's prohibited. I mean ---

8 **MR. CHURDAR:** Right, and I mean ---

9 **THE COURT:** And then it may be prohibited according
10 to the law.

11 **MR. CHURDAR:** My only -- I'm sorry.

12 **MS. ARMSTRONG:** The question is -- so if it's not
13 prohibited, which then we can all agree that
14 there's no need to be here, if it's not
15 prohibited, but yet the Coastal Zone Management
16 Act still -- we just talked about language that
17 says they should protect marine resources and we
18 talked about the critical area resources and why
19 they're important given special protection.
20 Now, it may not be prohibited, but is it going
21 to be a concern to him if there are going to be
22 impacts to the critical area. That's what I was
23 asking.

24 **THE COURT:** Well, maybe I misunderstood his answer.
25 I presumed that when he said prohibited, he



1 meant prohibited based on our evaluation of all
2 the context of that which I'm required to do to
3 make a decision and if I -- if I take into
4 account all those -- those considerations and I
5 say it's prohibited, then yes, I took that in
6 account. But how about if you just ask the
7 question again and let's -- maybe we can get
8 more specific -- or maybe, Mr. Joyner, if I
9 could understand your answer, your previous
10 answer, when you said prohibited, what did you
11 mean by that?

12 A: That was in reference to the critical area
13 regulations. They allow bulkheads.

14 **THE COURT:** Okay.

15 A: It's not a personal preference here.

16 **THE COURT:** Okay.

17 **MS. ARMSTRONG:** I was on the same page with Mr.
18 Joyner.

19 **THE COURT:** Okay. All right, go ahead.

20 Q: Let me see if I can recollect that question
21 because there wasn't actually an answer to it.
22 If there's an activity that will impact the
23 critical area, even though it's allowed under
24 the critical area regulations, but it yet will
25 have impacts for the critical area, would that



1 be of concern to the Department and something
2 that you would want to consider?

3 **MR. CHURDAR:** Your Honor, my objection was to the
4 extent that the -- and maybe I'm
5 misunderstanding the question, but and if that's
6 the case, then that's on me. But to the extent
7 that the policies that are established under 48-
8 39-30, Mr. Joyner said yes, those are important,
9 but those are focused primarily on critical area
10 permitting. And I mean, this is -- this is a
11 Coastal Zone Consistency Certification decision
12 and he said if something is allowed or denied,
13 you know, under the presumably I think the
14 policies of the CMP, that would be -- that would
15 be the guidance in whether we would make a CZC
16 certification decision. Anything beyond that
17 that's going back to the policies that say does
18 this give you concern, I would again say is not
19 relevant to his decision.

20 **THE COURT:** I think he's more than capable of
21 explaining to us what -- how he made his
22 decision, so I'm going to ---

23 **MR. CHURDAR:** Okay.

24 **THE COURT:** --- I'm going to allow her question.

25 **Q:** Curtis, the Coastal Management Program that



1 contains the policies that you use in making
2 this certification decision, where did the
3 authority come for developing the Coastal
4 Management Program, do you know?

5 A: From the Coastal Tidelands and Wetlands Act.

6 Q: So the Act itself is what gives authority to
7 even review ---

8 A: To develop.

9 Q: To develop the policies, right?

10 A: It says that -- back at that time, it told the
11 Coastal Council staff to develop regulations for
12 direct authority and enforceable policies for
13 indirect authority.

14 **THE COURT:** You don't know that statute cite, do you?

15 **MS. ARMSTRONG:** 48-39-80 ---

16 **MR. JOYNER:** 48 ---

17 **MS. ARMSTRONG:** --- is what authorized creation of
18 the ---

19 **THE COURT:** Okay. That's what I was looking for.

20 **MS. ARMSTRONG:** --- of the Coastal Management Program
21 policies. And certainly, the petitioner takes
22 a very different position from the Department
23 that the Act itself is not applicable to
24 decisions in the coastal zone, certification
25 decisions in the coastal zone.



1 THE COURT: Is that a ---

2 MR. WALKER: Yeah, we're in an examination, not a ---

3 THE COURT: Yeah.

4 MS. ARMSTRONG: I guess I was responding to ---

5 THE COURT: I was just trying to find the statute.

6 MS. ARMSTRONG: Oh, I was -- I thought you were
7 looking at something.

8 THE COURT: Oh, no. I found the statute.

9 MS. ARMSTRONG: Oh, okay. I was waiting for a cue
10 from you. I'm sorry.

11 THE COURT: I'm sitting here on Westlaw. That took
12 me about three seconds to find it. I cut and
13 pasted it, if that's of interest.

14 MS. ARMSTRONG: I'm sorry, Your Honor, I didn't mean
15 to like hold things up. I was kind of looking
16 and it seemed like you were looking for
17 something on there.

18 THE COURT: I cut and pasted it and now I'm
19 formatting it.

20 MS. ARMSTRONG: Okay.

21 THE COURT: To my liking.

22 MS. ARMSTRONG: All right.

23 Q: So, Curtis, we were discussing the concerns that
24 you had with potential impacts of the critical
25 area as a result of the project and you had some



1 concerns with marine debris landing in the
2 critical area that would negatively affect that
3 resource, didn't you?

4 A: Yes.

5 Q: And that marine debris was the wall and the
6 sewer line and the water line and the other
7 infrastructure that was proposed to be built,
8 correct?

9 A: Yes.

10 Q: Because you realized that Captain Sam's Spit's
11 a dynamic area, it's eroding and it's a very
12 real possibility that without a wall in the
13 critical area, then those structures would fall,
14 likely fall into the critical area, right?

15 A: They could.

16 Q: And you acknowledge that it's a very -- would be
17 a very real possibility the wall could fall into
18 the road without some sort of wall to stabilize
19 it, right?

20 A: Yes.

21 Q: And some things actually in the critical area
22 that's a big structure, it's pretty difficult to
23 remove, isn't it?

24 A: Yes, I was basing that on my experience in the
25 Coastal Services Division trying to get



1 abandoned boats out of the ...

2 **COURT REPORTER:** Out of the what, I'm sorry?

3 A: Abandoned vessels.

4 Q: Did the concern that houses built on Captain
5 Sam's Spit may become marine debris in the
6 critical area factor in to your decision at all?

7 **MR. WALKER:** Objection, Your Honor. There's no basis
8 for that. He's talking about the road and
9 suddenly she's talking about houses going in the
10 critical area. I don't think there's any
11 foundation for that. It's one thing to say a
12 road next to a wall, but now she's talking about
13 houses. I don't know what the factual basis is
14 for that.

15 **THE COURT:** Well, wasn't that included in her
16 question, is it a concern in your -- you said in
17 your permitting?

18 **MS. ARMSTRONG:** Yeah, and the permit ---

19 **THE COURT:** Yeah.

20 **MS. ARMSTRONG:** --- authorizes the construction of 26
21 residential -- 26 residential lots.

22 **THE COURT:** Yeah, I overrule that objection.

23 A: Not as much as the road and the infrastructure
24 at the narrowest point.

25 Q: And not enough to require -- impose any kind of



1 contingencies in your certification decision?

2 A: Right.

3 Q: And ultimately, as reflected in your permit
4 decision, the fact that houses that are built on
5 the spit may become marine debris, just like the
6 road and water and sewer lines, that didn't
7 actually factor into your ultimate decision at
8 all, did it?

9 A: I's sorry, could you rephrase the question? I
10 did not issue a permit, by the way.

11 Q: Certification, sorry. The fact that the houses
12 -- that houses to be constructed on the spit may
13 become marine debris just like the road and
14 water and sewer lines may become debris, did not
15 factor into your certification decision, did
16 they -- did it?

17 A: I think I was more concerned with just the area
18 where it's narrowest. As it moved along, I
19 became less concerned that things could end up
20 being marine debris.

21 Q: So did the fact that houses may become marine --
22 the fact that houses may become marine debris
23 didn't factor in to your decision, right?

24 A: I don't know that it didn't, I just -- I think
25 that it became less and less as we moved away



1 from the narrowest point of the spit.

2 Q: And any concern that you may have had is not
3 reflected in your decision document at all, is
4 it?

5 A: I don't believe so.

6 Q: And the fact that the certification decision
7 authorizes homes to be built in areas that are
8 barrier islands and identified as dynamic and
9 unstable and more prone to erosion didn't factor
10 into your decision either, did it?

11 A: No, I think it did.

12 Q: And how did that -- how is that reflected? How
13 is that consideration reflected?

14 A: I think it's reflected by the fact that there's
15 a contingency wall to at least stave off or
16 eliminate that threat.

17 Q: When a storm hits the shoreline or even brushes
18 by the shoreline, like Hurricane Matthew did,
19 that wall isn't going to do anything, have any
20 effect on any houses that are built on the spit,
21 will it?

22 A: I don't know.

23 Q: The wall was -- I think what you testified was
24 the wall was there to protect the road and the
25 sewer line and the other infrastructure, right?



1 A: For the most -- yes.

2 Q: It's not to protect the actual homes, because it
3 would be a distance away from the homes,
4 wouldn't it?

5 A: I believe it is, yes, or would be.

6 Q: So that wall isn't going to do anything to
7 actually protect those homes in the event of any
8 kind of storm event, is it?

9 A: I don't know.

10 Q: Curtis, do you think that there's any
11 possibility that the policies of the Coastal
12 Management Program and the Act itself could be
13 seeking to discourage development in areas like
14 Captain Sam's Spit?

15 A: I prefer the word manage. I think it allows us
16 to manage coastal resources and impacts to them.
17 We do it everyday.

18 Q: Do you think that it could be attempting to --
19 it could be read to discourage development in
20 the areas like Captain Sam's Spit?

21 A: Yeah, I think it could be now that I think about
22 it. I think if somebody's thinking about a
23 development and read the Acts and read the
24 policies, it could lead to discouraging them
25 from following through. That doesn't always



1 happen. So then we're put in a position of
2 managing that request and managing the impact.

3 Q: Could a road be built in the critical area?

4 A: Yes, as a bridge to somewhere. Let's don't say
5 coastal island, but, yes.

6 Q: Would you -- there's a possibility that could
7 happen here certainly, if there's another
8 breach, wouldn't it?

9 A: I don't know.

10 Q: Would you have certified that the sheet pile
11 wall, the road and the related infrastructure if
12 you knew that the road would be in critical
13 area?

14 A: No.

15 Q: If you learned today that the road would be in
16 the critical area, what action would you take?

17 A: Well, I think a condition on the CZ that
18 requires a new critical line addresses that. It
19 turns out today that -- or whenever they go to
20 construction, that that's the -- you know, that
21 that's there, and that the critical area has
22 moved somehow, then they'll have to redress it.

23 Q: And what would that entail from your perspective
24 as a -- as a regulator?

25 A: They may have to seek a critical area permit to



1 do whatever it is or they may, I don't know, be
2 out of luck. I don't know.

3 Q: Critical area lines are valid for five years,
4 aren't they?

5 A: That's my understanding.

6 Q: There have been multiple critical area line
7 delineations along Captain, the neck of Captain
8 Sam's Spit, haven't there?

9 A: Yes.

10 Q: What do you know about the critical area line
11 delineations for the other portions of Captain
12 Sam's Spit and I'm speaking now more about this
13 area (indicating), critical area line
14 delineations down here. What do you know about
15 those?

16 A: I think it wanders in and out, appropriately so,
17 taking in critical area.

18 Q: Do you know anything about the frequency of
19 those delineations?

20 A: Only to the extent that we -- we as the CZC
21 section asked for a new critical line delineated
22 from the applicant, which then triggered our
23 critical area staff to delineate multiple times.

24 Q: Do you know when the delineation was -- what
25 delineation was applicable to the other areas of



1 the Captain Sam's Spit when you reviewed the
2 certification of this project?

3 A: You mean which date?

4 Q: Yes.

5 A: Not offhand, no.

6 MS. ARMSTRONG: Please mark that.

7 COURT REPORTER: As one exhibit?

8 MS. ARMSTRONG: As one exhibit. Is it 43?

9 COURT REPORTER: 43.

10 (Petitioner's Exhibit Number 43 was marked for
11 identification purposes).

12 THE COURT: Ms. Armstrong?

13 MS. ARMSTRONG: Yes.

14 THE COURT: Do you need to mark any other exhibits,
15 so we can just go ahead and get them marked
16 right now, at least for this witness?

17 MS. ARMSTRONG: I don't think so.

18 THE COURT: Okay. I'm just trying to be efficient,
19 but that's -- we're good.

20 MS. ARMSTRONG: That's ---

21 MR. WALKER: This stack here. It's already Exhibit
22 8.

23 MS. ARMSTRONG: Right. It's -- the version that's in
24 evidence right now is pretty small and I had a
25 really difficult time reading it. I was worried



1 about the witness having a difficult time
2 reading it.

3 **MR. WALKER:** That's fine.

4 **MS. ARMSTRONG:** I mean, I just -- I wanted to make
5 sure we had a readable copy of this Exhibit.

6 **MR. WALKER:** It's 43?

7 **COURT REPORTER:** So this is a duplicate of which one?

8 **MS. WHITE:** Joint Exhibit 8.

9 **COURT REPORTER:** Thank you.

10 **MS. ARMSTRONG:** Your Honor, I told a fib, there is
11 one more that I ---

12 **THE COURT:** That's fine.

13 **MS. ARMSTRONG:** --- want to admit. I'm sorry -- or
14 get marked. I'm sorry.

15 **THE COURT:** That is a fib for which you will not be
16 condemned.

17 **MS. ARMSTRONG:** It was unintentional.

18 (Petitioner's Exhibit Number 44 was marked for
19 identification purposes).

20 **MOTION TO ADMIT PETITIONER'S EXHIBIT NUMBER 44:**

21 **MS. ARMSTRONG:** Your Honor, I'd like to move
22 Petitioner's 44 into evidence.

23 **MR. WALKER:** I'm sorry, which one is 44?

24 **MS. ARMSTRONG:** It's this image right here
25 (indicating).



1 **MR. GRESSETTE:** Which one, Tom? Is this one ours?

2 **MS. ARMSTRONG:** No, I gave you two and one has lat
3 and long and the other does not and this is the
4 one that doesn't have the lat and long.

5 **MR. WALKER:** So, just so I understand, Ms. Armstrong,
6 so what is -- is this just a scale down here?

7 **MS. ARMSTRONG:** This is a Google Earth image and,
8 yes, the scale is down on the left-hand corner,
9 yes.

10 **MR. WALKER:** And when was it ---

11 **MS. ARMSTRONG:** The imagery dates -- I think the
12 image -- it speaks for itself, it's a Google
13 Earth image. The date was generated by Google
14 Earth. The imagery dates 3/28/2017.

15 **MR. WALKER:** Yeah, that's fine. We have no objection
16 subject to we are not, in consenting to its
17 admission, in any way waiving early positions
18 stated about Google Earth. We are consenting to
19 this image, aerial image, which is fine.

20 **THE COURT:** Well, that takes me back to what I said
21 previously. I -- Google Earth, from my
22 perspective, is fine as far as hearsay because
23 the witness still has to be asked is it a like
24 representation of that which we're receiving, so
25 ---



1 MR. WALKER: Sure.

2 MR. GRESSETTE: And this is 44?

3 RULING OF THE COURT:

4 THE COURT: The other issues were not Google Earth is
5 what I want y'all to understand. It was the
6 application of other facts going into the
7 programming of Google Earth. All right. So
8 it's admitted.

9 (Petitioner's Exhibit Number 44 was admitted into
10 evidence).

11 MR. GRESSETTE: That's 44?

12 THE COURT: Mr. Churdar?

13 MR. CHURDAR: I thought that 43 was six pages, is
14 that ---

15 THE COURT: Well, I'm discussing 44 right now for the
16 record.

17 MR. CHURDAR: Is 44 the one with the ---

18 MR. WALKER: No.

19 MR. CHURDAR: Is that 40 ---

20 MR. WALKER: That's 44 and 43 is the survey/plat.

21 THE COURT: Well, I'm dealing with 44 right now.

22 MR. CHURDAR: Well, I'm just trying to be able to
23 respond to -- I got six pages and I just want
24 to know what the numbers are.

25 THE COURT: Oh, I didn't know. I thought 44 was just



1 a photo.

2 **MS. ARMSTRONG:** It is just a photo.

3 **MR. CHURDAR:** With the same caveats that Mr. Walker
4 had made.

5 **THE COURT:** Okay. Well, it's admitted.

6 Q: Curtis, we were talking about the different
7 critical area lines.

8 **(Joint Exhibit Number 5 was introduced into the**
9 **record at this time.)**

10 Q: I'm going to put on this screen what's been
11 already admitted as Joint Exhibit Five and ask
12 you are you able to identify what this is? I
13 can probably zoom in a little bit. Can you tell
14 me what you're looking at?

15 A: It's a critical line plat.

16 Q: So is this a plat that the Department signed off
17 on?

18 A: Yes.

19 Q: And I'm going to look at the second page of this
20 plat, can you tell what date this critical area
21 line was drawn?

22 A: Well, it says June 15th, 2011.

23 **(Petitioner's Exhibit Number 43 was introduced into**
24 **the record at this time.)**

25 Q: Now, I'm going to show you what's been marked as



1 Petitioner's Exhibit Number 43 and I think it's
2 -- I think you have a copy of that right in
3 front of you.

4 A: Yes.

5 Q: It's four pages, I believe.

6 A: Yes.

7 Q: Can you tell me what that document is?

8 A: It's a critical line plat.

9 Q: Is this one that the Department signed off on?

10 A: Yes.

11 Q: And when did you sign off, the Department sign
12 off on it?

13 A: Well, looks like Blair signed off on -- Blair
14 Williams signed off on May 31st, 2016, and then
15 Fred signed off on -- Fred Mallett signed off on
16 June 8th of 2016.

17 Q: Why are there two people that signed off on this
18 plat?

19 A: I would only imagine that Blair signed off on
20 Fred's action. He's his current supervisor.

21 Q: And what is the date of the critical line here
22 on ---

23 A: It states 5/9/15 or May 9th of 2015.

24 **(Petitioner's Exhibit Number 3 and 5 were introduced**
25 **into the record at this time.)**



1 Q: Okay. Now, Mr. Joyner, I want you to take a few
2 minutes or a few seconds or however long you
3 need and I'd like you to look at the second page
4 of Petitioner's Exhibit Number 3, and the second
5 page of Petitioner's Exhibit Number 5, if you
6 want to pull that out. I was going to take it
7 out, but it might be easier for you just to ---

8 **THE COURT:** I might not go along with however long
9 you need.

10 **MS. ARMSTRONG:** Pardon me, Your Honor?

11 **THE COURT:** I said I might not go along with however
12 long he needs.

13 **MS. ARMSTRONG:** Well, I am just trying not to rush
14 the witness. This is something important that
15 I think ---

16 **THE COURT:** Ms. Armstrong, I was just ---

17 **MS. ARMSTRONG:** Okay.

18 **THE COURT:** --- being humorous, or attempting to be.
19 Apparently, it failed.

20 A: Okay. I'm there.

21 Q: Can you compare those two lines for me? What do
22 you -- take a moment and look at the two --
23 those two pages, the one that I just had on the
24 screen showing this 6/15/2011 line and the
25 5/19/15 line.



1 A: Okay.

2 Q: And I want to make sure you have enough time to
3 verify this, but I've looked at this very
4 closely and I'm going to represent the lines
5 appear to be in the exact same location, would
6 you agree with that?

7 MR. WALKER: What exhibit are we looking at?

8 MR. GRESSETTE: It's Joint 3 and 5.

9 MS. ARMSTRONG: Joint 5.

10 MR. GRESSETTE: Yeah, and Joint 3.

11 MS. ARMSTRONG: And 43, which is ---

12 MS. WHITE: It's the same, just a larger version as
13 Joint 8.

14 MS. ARMSTRONG: Joint 8.

15 MR. GRESSETTE: Okay. And you were say Petitioner's
16 3 and 5 and I wanted to be sure of your
17 question.

18 MS. ARMSTRONG: I think I said Petitioner's 43.

19 MR. GRESSETTE: Okay.

20 MS. ARMSTRONG: And Joint ---

21 MR. GRESSETTE: Sorry; I wasn't trying to interrupt
22 you. I was just trying to help make sure we
23 were all talking about the same thing.

24 A: I think for very quickly, I would say that the
25 lines are the same from -- or resemble to be in



1 the same spot from -- I'm trying to figure out
2 how to reference it, but, anyway, from -- on the
3 Exhibit 43, they seem to be the same due west of
4 where it says DHEC OCRM Critical Line Toe of
5 Escarpment located flagged 5/12/16. To the
6 right of that or east of that it seems to be
7 different.

8 Q: Right, correct. That's the way I saw it also.
9 But it is the same west of that point, right?
10 Let's just look at a few areas together. If
11 you'd look at -- moving westward from the point
12 that you were just discussing where it says
13 Highland 4.095 square feet and .094 acres.

14 A: Correct, I see it.

15 Q: That same number is the exact same number on
16 both the 2011 and 2015 critical area line
17 delineations, isn't it?

18 A: Well, they're very close. Not exact, but
19 they're close. Oh, I see now. Never mind. I
20 see the same -- there's two references there,
21 two highland references. Yes, they are
22 identical.

23 Q: Yeah, so there are two different highland
24 references ---

25 A: That's right.



1 Q: --- of the same, right? Have you conducted
2 critical area line delineations and verified
3 lines before yourself?

4 A: I have conducted them, yes.

5 Q: And why do they -- what is your understanding of
6 why lines need to be re-drawn every five years?

7 A: As a little bit of history, you know, I was
8 involved. I can give the long explanation, but
9 in short, there were no expiration dates back in
10 the day. And so there were problems with that
11 in that marsh areas were being impacted with a
12 critical line that never expired.

13 Q: But the marsh changes, doesn't it?

14 A: Yes, they're very -- they're dynamic.

15 Q: Because there are tidal influences and ocean
16 influences all at work that affect how far the
17 tide gets up and how it impacts the landscape,
18 right?

19 A: Right.

20 Q: And when we've got an area like Captain Sam's
21 Spit that's been influenced by erosional forces
22 along the Kiawah River and, most recently, an
23 inlet relocation, those are pretty significant
24 natural forces that would -- you would expect
25 those kinds of things to affect the critical



1 area line boundary, wouldn't you?

2 A: It may influence them, yes.

3 Q: So it's actually pretty unusual for the critical
4 area line to be in exactly the same location in
5 2015 as it was in 2011 on this piece of land,
6 isn't it?

7 A: I would say that they could be different.

8 Q: You would expect them to be different, wouldn't
9 you?

10 A: I'd be surprised if they weren't.

11 MS. ARMSTRONG: Just a minute, Your Honor, I think
12 I'm done or close.

13 **MOTION TO ADMIT PETITIONER'S EXHIBIT NUMBER 43:**

14 MS. ARMSTRONG: Your Honor, petitioner moves
15 Petitioner's Exhibit 43 into evidence.

16 MR. WALKER: No objection.

17 MR. CHURDAR: No objection.

18 **RULING OF THE COURT:**

19 THE COURT: It is admitted.

20 (Petitioner's Exhibit Number 43 was admitted to
21 evidence).

22 Q: Just a few more questions. Mr. Joyner, you
23 received comments from resource agencies, didn't
24 you?

25 A: Yes.



1 Q: And are those resource agency comment letters
2 something that the agency's required to consider
3 in its review?

4 A: Yes.

5 Q: And what was the content of those letters, do
6 you recall?

7 A: There were two I recall. DNR, the Department of
8 Natural Resources and Fish and Wildlife
9 Services. The content was they were making us
10 aware of how dynamic the area is.

11 Q: And they recommended that it's too unstable to
12 be built on, didn't they?

13 A: I believe that's what they said.

14 Q: Both Fish and Wildlife Service and DNR made that
15 recommendation?

16 A: I'm not sure that DNR actually said that, I'd
17 have to see the document.

18 **(Petitioner's Exhibit Number 18 was introduced into**
19 **the record at this time.)**

20 Q: DNR letter, I'm handing you Exhibit Number --
21 Petitioner's Exhibit Number 19 -- or I think
22 that's 18, sorry. It is 18. On the second page
23 of that DNR letter, DNR strongly discouraged
24 development of this sensitive coastal barrier
25 habitat, especially those located within dynamic



1 inlets like Captain Sam's Spit. That was their
2 recommendation, wasn't it?

3 A: Yes.

4 Q: But that recommendation didn't weigh into your
5 certification decision, did it?

6 A: I don't know that it didn't. They just said
7 they strongly discouraged. They don't have
8 prohibition authority. They can say what they
9 say. To me, it's what they wanted to say.

10 Q: Do you remember in your deposition testimony
11 telling me that you -- that wasn't a
12 consideration that you took into account when
13 you were making your certification decision,
14 that you relied on the agencies for information
15 related to threatened and endangered species?

16 A: Yes, that would be the primary -- our primary
17 way of going about it. The letters just sort of
18 bring our attention to them.

19 Q: If I use the term threatened and endangered
20 species, what does that mean to you?

21 A: To me it means that it's a GAPC, a geographic
22 area of particular concern, which is a component
23 of our Coastal Zone Management Program.

24 Q: And what is the terminology threatened and
25 endangered species mean?



1 A: Well, it references the federal definition of
2 what the species is undergoing at the time,
3 whether they're threatened and endangered or
4 not. Policies direct us to take that into
5 consideration.

6 Q: And if the Fish and Wildlife Service letter in
7 January 2012 references the Endangered Species
8 Act, are they the ones who provide the
9 information and opinions related to threatened
10 and endangered species to the Department?

11 A: Yes.

12 Q: And you rely on the federal agency, Fish and
13 Wildlife Service, for their opinions about
14 threatening endangered species, correct?

15 A: Yes, as it relates to the program policies.

16 Q: And the Fish and Wildlife Service identified
17 concerns with impacts to threatened and
18 endangered birds and turtles, didn't they?

19 A: I believe so.

20 Q: And the Fish and Wildlife Service's letter dated
21 October 4, 2011, if you look at that middle
22 paragraph, the Fish and Wildlife Service says
23 that the Service finds in general the south end
24 of Kiawah Island is inappropriate for permanent
25 development of this nature. Inlet zones such as



1 this are dynamic and are the subject of
2 erosional processes from ocean-generated waves
3 and watershed drainage through the Kiawah River.
4 They continue that historical aerial photography
5 of Captain Sam's Inlet shows significant and
6 dramatic changes to the inlet location and
7 island contours over the years and we do not
8 believe an area that is prone to significant
9 changes from both long-term processes and storm
10 events should be artificially anchored through
11 hardened developments. But you didn't take --
12 you didn't do anything with this strong language
13 saying that the south end of Kiawah is
14 inappropriate for development, did you?

15 A: I read the letter.

16 Q: You read the letter ---

17 A: Uh-huh.

18 Q: --- but that -- you didn't do what they
19 recommended, which was acknowledge that it's
20 inappropriate for permanent development, did
21 you?

22 A: No.

23 **MOTION TO ADMIT PETITIONER'S EXHIBIT NUMBERS 18 AND**
24 **19:**

25 **MS. ARMSTRONG:** Your Honor, Petitioner's move



1 Petitioner Exhibits 18 and 19 into evidence.

2 **MR. WALKER:** Objection, hearsay. She can ask whether
3 he considered it, but it's hearsay and it's
4 being offered into evidence for the truth of the
5 matter. He's already responded to it whether he
6 considered it or not, but we don't have a chance
7 to cross-examine these people. We would like to
8 cross-examine these people. But he can say --
9 I have no problem with her saying did you
10 consider that comment, but I don't think the
11 letter comes in ---

12 **THE COURT:** Isn't that part of the Department's
13 permitting file?

14 **MR. WALKER:** Well, we went through this last time in
15 the prior proceeding and simply because
16 something was in the permitting file, it's still
17 hearsay.

18 **THE COURT:** Well, it comes in as part of the file,
19 whether -- it doesn't come in necessarily for
20 the truth of the matter asserted, it just comes
21 in as part of the file. But I don't know if
22 there's anything in there that really asserts
23 truths, it's just ---

24 **MR. WALKER:** Well, there are a number of positions
25 and statements taken that this property behaves



1 in a certain way, that there's been this
2 dramatic change, all thee things, and there are
3 material facts that we would cross-examine this
4 writer on that are not stated here, such as the
5 relocation of the inlet and its effect of the
6 morphology of the Captain Sam's.

7 **THE COURT:** I understand that, but it comes -- it
8 still would come in. It's just not -- as far as
9 the permitting file, but not for the truth of
10 the matter asserted. I take that position
11 almost every day. Is there anything incorrect
12 about that?

13 **MR. WALKER:** All right. So ---

14 **MS. ARMSTRONG:** For notice and inquiry is what ---

15 **THE COURT:** What?

16 **MS. ARMSTRONG:** For notice and inquiry is all. I
17 mean, the Department had notice of it. This was
18 something that they considered. I mean, I think
19 it certainly is admissible to come in to show
20 that.

21 **MR. WALKER:** If it's for the limited purpose of
22 showing what the comment was and whether he
23 responded, notice and inquiry, I'm fine.

24 **THE COURT:** Well, that's what it's coming in ---

25 **MR. WALKER:** I just don't want it to be coming in for



1 the truth of the matter asserted because we have
2 no right ---

3 **THE COURT:** All right. We're there. We're there.
4 We're there.

5 **MR. CHURDAR:** I would -- I would agree with that
6 limitation.

7 **RULING OF THE COURT:**

8 **THE COURT:** Okay. It's admitted for the purposes of
9 notice and inquiry.

10 **(Petitioner's Exhibit Numbers 18 and 19 were admitted**
11 **into evidence).**

12 **MS. ARMSTRONG:** I don't have any other questions for
13 this witness.

14 **THE COURT:** And we're breaking for lunch. It's 1:05.
15 What time are we going to come back?

16 **MS. ARMSTRONG:** Well, I have 1:07 and if we're going
17 to try and look at ---

18 **THE COURT:** Oh, well my clock ---

19 **MS. ARMSTRONG:** --- and we're going to try and look
20 at -- 1:08, we're losing minutes. Ticking away.
21 We're going to try and look at the exhibit and
22 make some determinations about what portions of
23 the summary review ---

24 **THE COURT:** Well, we don't have to do that -- you
25 don't have to do that at lunch. Like I said, we



1 can do that at any time.

2 **MS. ARMSTRONG:** Can we have 'til 2:30?

3 **MR. WALKER:** And, Your Honor, I'm fine with -- she
4 can look at them over the weekend ---

5 **MS. ARMSTRONG:** Okay.

6 **MR. WALKER:** --- and make her suggestions as to what
7 she thinks is a factor and we can take it up
8 later. I don't want to pressure her at lunch.

9 **THE COURT:** Well, 2:30 is the only question before
10 me.

11 **MR. WALKER:** Fine.

12 **THE COURT:** Or 2:15.

13 **MR. WALKER:** Well, we're fine with the later hour
14 just for my scheduling with our witnesses for
15 the efficiency of the operation of The Court.
16 I'm not going to have a tremendous amount of
17 cross-examination. I don't know about Mr.
18 Churdar, who had two witnesses to go today and
19 one of them is in the courtroom -- was in the
20 courtroom, Jennifer Hayes, she will be back and
21 she's the engineer who designed the wall, and
22 she was the medium witness I referred to. The
23 witness after that was going to be Tim Kana, and
24 he is going to be a long witness. And long --
25 I don't mean any longer than anybody that's been



1 here. It seems like ---

2 **THE COURT:** We've had some witnesses I thought would
3 be short that turned out long.

4 **MR. WALKER:** Right, right. And so I guess I'm
5 getting ahead of myself, but I am just
6 wondering, I didn't anticipate it was going to
7 take this long to do two Department witnesses
8 today and I'm speaking more generally about
9 scheduling. My preference would be to start Tim
10 on Monday.

11 **THE COURT:** Well, we're going to go from -- do you
12 have a witness to go today to a witness who is
13 going to go today?

14 **MR. WALKER:** No, I do. He can come over.

15 **THE COURT:** Out the door.

16 **MR. WALKER:** He can certainly come over. I can tell
17 him to come over ---

18 **THE COURT:** No, I was going to say to go and we'll do
19 him Monday is what I'm getting at.

20 **MR. WALKER:** Oh, yeah, yeah.

21 **THE COURT:** Well, he's not even here, so ---

22 **MR. WALKER:** Well, the good thing is he's in
23 Columbia.

24 **THE COURT:** Okay.

25 **MR. WALKER:** And I can say get over here at 4:30 if



1 we want to start doing that at 4:30 today or we
2 could do it -- start on Monday. So maybe this
3 is ---

4 **MS. ARMSTRONG:** I would prefer to start on Monday.
5 I don't really want -- starting a big witness at
6 4:30 on a Friday afternoon, assuming we can
7 start with him at 4:30.

8 **MR. WALKER:** Yeah, I need to make sure he can be
9 available Monday, but if that's all right with
10 Ms. Armstrong, can we agree that we take Ms. --
11 do the motions, take Ms. Hayes, and then begin
12 Tim on Monday?

13 **THE COURT:** Over lunch find out if he's available.

14 **MR. WALKER:** I'll do it.

15 **THE COURT:** Okay. Thank you.

16 **MR. CHURDAR:** 2:30?

17 **THE COURT:** 2:30 come back. All right. We're
18 adjourned until 2:30.

19 (A lunch break was taken from 1:10 p.m. until 2:33
20 p.m.)

21 **MR. WALKER:** Ready to go.

22 **THE COURT:** Yeah.

23 **MR. JOYNER - CROSS-EXAMINATION BY MR. WALKER:**

24 Q: Mr. Joyner, I'm just going to ask you a few
25 questions about this memo that's been up for the



1 last hour or two. When we look at that, it's
2 not limited to Cape Charles, is it? It says and
3 others.

4 A: It does say and others.

5 Q: All right. And this memo was three and a half
6 years before -- it's November 15, 2011, three
7 and a half years before your consistency --
8 final consistency certification was issued in
9 May of 2015?

10 A: That's correct.

11 Q: And you didn't consult this memo in any way in
12 making your determination, did you?

13 A: I did not.

14 Q: In fact, you had never seen it until it was
15 thrown up there, right?

16 A: I believe I testified that I had heard about it
17 or was aware of it.

18 Q: But you didn't consider it?

19 A: No.

20 Q: And by that time, it had been -- if the
21 application for the stormwater and the water and
22 sewer were put in in August of 2011, by May
23 2015, it had been over three and a half years
24 since the application had been put in before the
25 determination, right?



1 A: That's right.

2 Q: And that, you would agree, is a long time to get
3 a decision, isn't it?

4 A: Very much.

5 Q: Ms. Armstrong asked you a question whether the
6 sheet pile wall would affect the ability of the
7 inlet to migrate and I thought I understood you
8 to say that it would.

9 **(Petitioner's Exhibit Number 41 was introduced into**
10 **the record at this time.)**

11 Q: Now, I'm looking at Plaintiff's Exhibit 41 and
12 do you see where you discussed that in your
13 certification?

14 A: Yes.

15 Q: And you reviewed this before it went out and
16 approved it and signed off on it, right?

17 A: Yes.

18 Q: And in that, you said it was unknown if the
19 natural migration of Captain Sam's Spit would
20 cease, correct?

21 A: That's correct.

22 Q: And we're really talking about two different
23 areas, aren't we, where -- and one is since
24 we're talking about the riverbed and the inlet
25 itself is about a mile away, right?



1 A: Yes.

2 Q: You are not a coastal geologist?

3 A: No.

4 Q: So you do not consider yourself as one trained
5 and experienced to render an informed opinion
6 about whether stabilization of the riverbank is
7 going to be affect the migration of the tip of
8 the spit or Seabrook, are you?

9 A: No.

10 Q: In a similar vein, you were asked about the
11 letters from Fish and Wildlife and you did, in
12 fact, consider those in this -- or they were, in
13 fact, considered in this staff determination,
14 correct?

15 A: Yes, they were referenced and considered.

16 Q: It wasn't as though you ignored it, did you?

17 A: No, we did not ignore what the resource agencies
18 were saying. We just weighed them against what
19 we feel the program document or program allows
20 and considers.

21 Q: And some of the things that you considered here,
22 at least with respect to Fish and Wildlife, were
23 that they were concerned about artificial
24 nighttime lighting and they had recommended
25 lighting restrictions and limiting beach access



1 rights to a single walkover to eliminate or
2 minimize impacts. And, in fact, when you did
3 the final certification you did abide by the
4 lighting restriction, correct, make that a
5 condition?

6 A: Yes, we did.

7 Q: All right. And you did limit the number of
8 beach walkovers, correct or boardwalks to the
9 beach?

10 A: Yeah, I think by agreement, yes.

11 Q: Yeah. Likewise, when we get to DNR, I didn't
12 highlight this, but you did address DNR's
13 comments, did you not, about ---

14 A: Yes.

15 Q: --- sea turtles and piping plovers?

16 A: Yes.

17 Q: And starting about four lines down near the end
18 you specifically commented, or the agency
19 commented the beach along this portion of the
20 island is designated piping plover critical
21 habitat, however, the development will be
22 located from one to five rows of dunes away from
23 the beach. In that regard, SC DNR did not
24 conclusively state that there would be an
25 effect. And then you went on to address the



1 loggerhead sea turtles as well. And you
2 commented on the residential lighting
3 restriction that we just talked about, right?

4 A: That's correct.

5 **MR. WALKER:** Your Honor, that's all I have.

6 **THE COURT:** All right. Mr. Churdar?

7 **MR. JOYNER - CROSS-EXAMINATION BY MR. CHURDAR:**

8 Q: All right. Good afternoon, Mr. Joyner. I would
9 like to go -- before I get into questions
10 particular to the staff assessment and the CZC
11 certification itself, I would like to just back
12 up and not plow through all the ground, but give
13 some background for your education experience,
14 your understanding of what the CZC certification
15 process is, and what goes into that before we
16 actually get into it. So, I know Ms. Armstrong
17 asked you about your work background, but can
18 you tell The Court what's your educational
19 background, as well?

20 A: I have a Bachelor's in geography.

21 Q: Okay. And what is a CZC certification?

22 A: I can read the decision, it is -- I mean, the
23 definition. It's a decision made with respect
24 to a direct federal activity development
25 project, a federal permit or license, or a



1 federal funding or assistance -- funding
2 assistance program, and also the consistency of
3 state permits that operate in a coastal zone.

4 Q: Okay. And so what would be the -- probably the
5 most typical circumstance that a Coastal Zone
6 Consistency Certification would be needed?

7 A: Most typically, it would be a state permit that
8 operates in the coastal zone and the most -- the
9 majority of what we review are the NPDES
10 stormwater permit, in most cases.

11 Q: Okay. As we have in this instance?

12 A: That's right.

13 Q: And the purpose of this, of the certification is
14 what?

15 A: The purpose is to review projects that are under
16 consideration in the coastal zone against the or
17 in relation to the policies that are contained
18 within the Coastal Zone Management Program,
19 which is a federally approved program.

20 Q: Okay. But typically, this would be for a -- a
21 permit that does not have -- the Department does
22 not have direct critical area permitting
23 authority, is that correct?

24 A: In this instance, yes, DHEC OCRM does not have
25 direct permitting authority. It's our indirect



1 authority that we're talking about.

2 Q: Okay. And when you make a Coastal Zone
3 Consistency Certification determination, that
4 there has been a lot of talk about the decisions
5 that you've made with regard to this project,
6 but what is the governing document that guides
7 you in that decision?

8 A: It's the Coastal Zone Consistency Determination
9 Memo.

10 Q: Okay.

11 A: It's a memorandum.

12 Q: And what I would like to do is just go through
13 both the -- your certification, I don't want to
14 just read it, I don't know that that would be of
15 any help to the Court, but the certification, as
16 well as the staff assessment, and just have you
17 explain how you apply the policies that you have
18 listed in the certification and staff
19 assessment. Do you have the certification
20 decision with you?

21 A: I -- it's probably up here somewhere.

22 **THE COURT:** Well, while he's looking for that, can I
23 ask you is there any way that I could get a hold
24 of the Coastal Zone Consistency Memo just to be
25 looking through it?



1 MR. WALKER: Well, I've got ---

2 THE COURT: After the hearing's over, so I could be
3 prepared when I get the proposed orders.

4 MR. WALKER: Well ---

5 MS. ARMSTRONG: Wait, are we talking about the
6 summary of review? Isn't that in evidence or is
7 that something else? I'm sorry.

8 MR. WALKER: He's talking about the actual
9 certification, right?

10 MR. CHURDAR: Yeah, yeah. I mean, both of these are
11 in evidence.

12 MS. ARMSTRONG: It's in evidence.

13 MR. CHURDAR: But you're asking for the document ---

14 THE COURT: Yeah.

15 MR. CHURDAR: --- the program document?

16 THE COURT: Yeah, the program document.

17 MR. CHURDAR: Okay. Well, that would be available on
18 the DHEC website.

19 THE COURT: Oh, it is?

20 MR. CHURDAR: Yes, sir.

21 THE COURT: All right.

22 MR. CHURDAR: Yes, sir. So I've got a hard copy
23 right here ---

24 THE COURT: No, I prefer stuff electronically.

25 MR. CHURDAR: Electronic, okay.



1 **THE COURT:** Y'all can kind of tell by now.

2 **MS. ARMSTRONG:** Yeah, I know Mr. Chandler and I
3 provided one to The Court several years ago ---

4 **MR. CHURDAR:** It's Exhibit 6, Joint Trial Exhibit 6,
5 right there, and the -- Okay. Okay. And then
6 the staff assessment is right -- okay, you've
7 got the staff assessment.

8 **(Joint Exhibit Number 6 was introduced into the**
9 **record at this time.)**

10 **Q:** The CZC cert is going to come up on the screen
11 here in just a second if you want to just work
12 from that. Can you make it a little bigger?
13 Okay. If you, Curtis, can just go through and
14 just explain the certification decision. Just
15 go through and discuss, I think probably the
16 special conditions starting with one would be a
17 real good place to start.

18 **A:** Well, the first paragraph basically touches upon
19 the policies that we reviewed, the individual
20 policies. And then we moved towards, you know,
21 proposed conditions or kitchens that are to be
22 attached to the issuing permit, which in this
23 instance is the NPDES StormWater Permit and the
24 Wastewater Water Supply Permits. And attached
25 with that are conditions that we placed on the



1 Coastal Zone Consistency so there's three
2 options for Coastal Zone Consistency
3 determination, consistent, consistent with
4 conditions, or inconsistent.

5 Q: Okay.

6 A: So inconsistent is like a denial.

7 Q: So with these conditions, then what you're
8 saying is you've got one and two on the top page
9 and then eight on the second page. If the
10 permit holder does not comply with these, then
11 you're saying the CZC certification is not
12 valid?

13 A: Well, I would say that they're in compliance
14 with the issue permit and just generally
15 speaking. And with that, there might be some,
16 you know, reaction ---

17 Q: Okay. Well, can you go ahead and start with the
18 first condition on your Coastal Zone Consistency
19 Certification decision?

20 A: Uh-huh. Basically, condition number one asks for
21 a critical line, a new updated critical line to
22 be submitted and approved within 30 days of
23 construction.

24 Q: Okay. And why is that in there?

25 A: To make -- to ensure that the project would be



1 -- remain consistent with the policies.

2 Q: Okay. And ---

3 A: In particular, with the critical area. The
4 adjacent critical area.

5 Q: Okay. And so the current critical area
6 delineation that is submitted as part of the
7 application package, will then be superceded by
8 a new one before construction starts?

9 A: Yes.

10 Q: Okay. Now, special condition number two, can
11 you please address the sheet pile wall? We've
12 talked about it at some points during the trial,
13 but can you please explain why that was a
14 condition to you finding this to be consistent.

15 A: Well, we felt like that for the activity to take
16 place, the development to take place, it should
17 be -- half of the wall is phased in and
18 constructed in phases. So, for example, build
19 the wall in phases before they start
20 construction of the road or the wastewater
21 lines, the sewer lines, the water lines, et
22 cetera ---

23 Q: Uh-huh.

24 A: --- so that, you know, the area is stabilized
25 prior to the upwind development.



1 Q: Okay. The third special condition, if you could
2 please -- yes, please address the third special
3 condition of the CZC certification.

4 A: Basically, we're trying to ensure that the work
5 stays out of the critical area.

6 Q: Okay. And the fourth special condition, I think
7 that you've already addressed that to some
8 degree with Mr. Walker's cross-examination just
9 a moment ago. Is there anything else that you
10 feel like you need to add to what you've
11 provided earlier on the special condition ---

12 A: Well, condition number four is basically
13 reiterating an agreement that they have with the
14 Town of Kiawah.

15 Q: Okay.

16 A: And then number five has to do with the
17 limitation on pole mounted lighting and
18 illuminating towards the beach.

19 Q: And the purpose behind that special condition is
20 what?

21 A: To lessen effects on sea turtles.

22 Q: Okay. And I think it's assumed, but the point
23 is how would pole mounted lighting create a
24 negative effect?

25 A: Because it's elevated and shines down.



1 Q: And what does that do to sea turtles?

2 A: It -- much like the Cooper River Bridge, it
3 would -- light from pole mounted would
4 essentially scare the turtles away is the best
5 way I can put it ---

6 Q: Okay.

7 A: --- from nesting.

8 Q: Okay. Okay. The sixth special condition that
9 you put on your CZC certification, if you could
10 please address that?

11 A: That just basically reduced the number of beach
12 access walkways and, again, that was in
13 agreement with them, the outfit.

14 Q: Okay. And the seventh condition, what is the
15 reason or purpose behind conditioning the CZC
16 certification with that one?

17 A: Just to preserve any remaining -- remaining
18 upland acreage.

19 Q: Okay. And then the last one, special condition
20 number eight?

21 A: That's a standard condition that we put on every
22 Coastal Zone Consistency. It's what we call a
23 late discovery clause. If there's any, you
24 know, recovered cultural resources, they have to
25 report it to the proper office.



1 Q: Now, the policies in the Coastal Zone
2 Consistency Manual, would it be a fair
3 characterization to say that it is a list of
4 them not necessarily applicable to every permit
5 application?

6 A: That's true.

7 Q: Okay. So if I could invite your attention to
8 the Petitioner's Exhibit 41 that I think is on
9 your desk there.

10 **(Petitioner's Exhibit Number 41 was introduced into**
11 **the record at this time.)**

12 A: Yes.

13 Q: Now, that being the case for this particular
14 Coastal Zone Consistency Certification, you did
15 not find all of the policies of the Coastal Zone
16 Consistency Manual to be applicable in this
17 case?

18 A: That's true.

19 Q: Okay. And the -- starting on page two of that
20 document, you had at the bottom you have a black
21 box beside ---

22 **MR. CHURDAR:** Do you have page ...

23 **(Off the record discussion.)**

24 Q: On page two of that document you've got a black
25 box beside the policy assessment entitled



1 residential development?

2 A: Yes.

3 Q: Okay. So before we go through each one of these
4 just briefly, every -- as you look through the
5 policies of the CZMP, every one has a black box
6 beside it indicates that you saw that particular
7 policy to be relevant to your Coastal Zone
8 Consistency Certification determination in this
9 particular case?

10 A: That's correct.

11 Q: Okay. So what I'd like to do is just go through
12 each one of those -- actually, before I do that,
13 on page two, before we get to the policy
14 assessment section on page two, there was some
15 questions at the end of the examination by Ms.
16 Armstrong about the letter from the U.S. Fish
17 and Wildlife Service and she had talked about
18 what you had testified to in your deposition
19 regarding their concerns about development.
20 And I would like to invite your attention to --
21 I've got your deposition outline up there in
22 that notebook on the ledge and I'd like to --
23 that's right, you've got the right notebook.

24 **MS. ARMSTRONG:** I'm sorry, Brad, you said outline?
25 Deposition -- the deposition itself or the



1 outline?

2 **MR. CHURDAR:** Transcript. The deposition transcript.

3 **MS. ARMSTRONG:** I thought I heard a word outline.

4 **MR. CHURDAR:** I may have misspoken and said outline.

5 I meant ---

6 **THE COURT:** You said outline, but he meant
7 transcript.

8 **MS. ARMSTRONG:** Okay. There was something -- the
9 transcript's fine. If there was something else
10 that was created, I wanted to know what it was.

11 **MR. CHURDAR:** No.

12 Q: If you could -- if I could invite you attention
13 to page 13 of your deposition transcript and you
14 see -- are you there?

15 A: Uh-huh. Yes.

16 Q: Okay. And you see on page four, the question
17 that she was asking you about this morning was
18 actually a question that was asked at your
19 deposition and she said starting with the U.S.
20 Fish and Wildlife Service letter, the Fish and
21 Wildlife Service comments that the project is
22 inappropriate for permanent -- the location of
23 the project is inappropriate for permanent
24 development and the area is prone to significant
25 change and should not be artificially anchored



1 through development. How did you utilize the
2 Fish and Wildlife, that particular comment from
3 Fish and Wildlife Service in your certification
4 decision and what you had said at that point was
5 I think the way I utilized it was summarizing
6 the tone or the content of their letter in
7 relation to what they were really talking about,
8 which was the effects on federally threatened
9 species. So the last sentence where, you know,
10 got to me to where our thinking was in summary
11 of their letter. So, it was in that context
12 that you applied the concerns expressed in the
13 U.S. Fish and Wildlife letter as part of your
14 Coastal Zone Consistency Certification decision.
15 Is that correct?

16 A: Yes.

17 Q: Okay. Now, if you could, please, go down to the
18 first policy of the applicable policy in the
19 Coastal Zone Management Program document on
20 residential development. And I'm not asking you
21 just to read what's there, but if you could just
22 summarize how you saw each one of these policies
23 as they applied to this particular CZC
24 certification decision.

25 A: Well, obviously, starting with the fact that



1 there's a proposed residential development, in
2 my mind, that triggered the residential
3 development policy.

4 Q: Sure. Okay.

5 A: And it's two pages worth, but -- or a page and
6 a half worth of policies, but, I mean, we felt
7 like the development as proposed met the
8 criteria in the policies ---

9 Q: Okay.

10 A: --- in avoiding, you know, flood prone areas,
11 wetlands, things of that nature.

12 Q: Okay. Now, I'm going to get to this in a little
13 bit or ask you questions in a little more detail
14 when we get to the section on barrier islands,
15 but is it fair to say that the residential
16 development policy under the CZMP does not
17 prohibit residential development? It's not a
18 prohibition on residential development?

19 A: No, it's a guide.

20 Q: Okay. Is there anything else about the -- your
21 policy assessment under the residential
22 development policy of the CZMP that -- because
23 I felt like I kind of interrupted you?

24 A: I think most importantly the policies for
25 residential development, as well as commercial,



1 contemplate, you know, water quality drainage
2 and things of that nature, to limit water
3 quality implications in any receiving water
4 bodies, which, in this sense, this would be the
5 Kiawah River.

6 Q: Okay.

7 A: And they are doing that with the stormwater
8 management plan practices that are going to be
9 put in place.

10 Q: Okay.

11 A: So that's very specific, I think, and, you know,
12 in managing coastal effects.

13 Q: Right. Okay. Okay. The second policy on top
14 of page three that you have a black box by
15 meaning you considered that relevant in your
16 Consistency Certification Determination was with
17 regard to transportation facilities. What --
18 how did you see that policy as being relevant to
19 your certification decision?

20 A: The planned road or roads.

21 Q: Okay.

22 A: Yeah.

23 Q: It's just as simple as that?

24 A: Simple as that.

25 Q: Okay. Now, the third, you don't have a black



1 box beside coastal industries, so you --
2 agriculture, forestry, mineral extraction,
3 manufacturing, fishing, seafood processing and
4 aquaculter, you didn't consider that policy?

5 A: No, I did not.

6 Q: And the reason is I think obvious, but what is
7 the reason?

8 A: They're not proposing any of those activities.

9 Q: Okay. And how about the policy number four,
10 commercial development, same thing?

11 A: Same thing. It's not commercial development in
12 the sense that somebody's building a retail
13 shopping center. They're not doing that.

14 Q: Okay. Now, policy number five, recreation and
15 tourism. Why did you deem that to be relevant
16 to your CZC Certification decision?

17 A: Primarily because it's not underlined, but
18 primarily because of the parks and open spaces
19 portion of that in that project that's adjacent
20 to Beachwalker County Park.

21 Q: Okay. Now, your statement in the analysis there
22 said it's consistent -- the project is
23 consistent with the development, would not
24 negatively alter the Beachwalker Park and the
25 beach on Kiawah Island? I have a question, but



1 I'll scratch that. So let's look at policy
2 number six, marine-related facilities. Marina's
3 boat ramps, docs, and piers, you didn't check
4 that off for the reason that ---

5 A: In this particular instance, any review would
6 occur with a critical area permit and has. So
7 they are not asking for any of those structures
8 through this permit.

9 Q: Okay. And let's go on to the next one. Policy
10 number seven, Wildlife and Fisheries Management,
11 talks about in parentheses there the Wildlife
12 and Fisheries manage artificial reefs and
13 impoundments. Now, you didn't check that box
14 off, why is that?

15 A: Well, there's no artificial reef here. There's
16 no impoundments here and then as far as
17 fisheries management, that's not what they're
18 doing. They're not managing fisheries.

19 Q: So any wildlife habitat that would be taken into
20 consideration under this policy assessment, is
21 it your opinion that that would not apply to the
22 CZC certification decision? I mean, if it's not
23 under Wildlife and Fisheries Management, is that
24 fair?

25 A: That's fair. They're not managing those



1 resources.

2 Q: Okay. Same thing with dredging? I mean, I
3 don't want to beat a dead horse, but number
4 eight, policy number eight on dredging, you did
5 not consider that because there was no ---

6 A: Right.

7 Q: --- dredging issue in this -- any of the permits
8 that you were certifying?

9 A: Correct.

10 Q: Okay. Now, policy number nine with regard to
11 public services and facilities, you did find
12 that to be a policy CZC -- or CMP policy that
13 was brought to bear on this certification
14 decision and why was that?

15 A: Simply because they requested the wastewater and
16 water supply permits from Bureau of Water.

17 Q: Okay. And I'll just lump ten and eleven
18 together. You did not find it necessary to
19 apply erosion control or energy and energy-
20 related facilities' policies here and is that
21 also like the other ones because you found this
22 did not -- was not applicable to this permit
23 decision -- I mean, excuse me, the CZC
24 Certification decision?

25 A: Correct. The erosion control policies tend to



1 hint towards critical area only.

2 Q: Okay.

3 A: And then the energy and energy-related
4 facilities, there's -- that's pretty
5 straightforward. There's a power plant here.

6 Q: Okay. Now, there are -- the next section is
7 section twelve, the policies involving
8 activities and areas of special resource
9 significance and you have actually put quite a
10 bit of analysis in with regard to barrier
11 islands, dune areas, and public open spaces.
12 I'm not asking you to read your analysis, but if
13 you could explain to The Court why you took
14 those into consideration in your CZC
15 Certification decision.

16 A: Well, Kiawah Island and the spit, Captain Sam's
17 Spit is on a barrier island.

18 Q: Uh-huh.

19 A: It is our belief that the spit makes up a dune
20 area, a very significant one. And the beach and
21 the area behind along the Kiawah River can be
22 considered public open spaces.

23 Q: Okay.

24 A: Or should be considered public open spaces.

25 Q: Now, just if I could invite your attention to



1 the top of the page, the next page, where you've
2 got a subsection on barrier islands, are you
3 there?

4 A: (Nods head.)

5 Q: Okay. You say the South Carolina CZMP policy on
6 barrier islands recognizes barrier islands as
7 one of the most dynamic and fragile coastal
8 resources. Because of this fragile and dynamic
9 nature and resource value, specific additional
10 policies are included in section 7(a) of the
11 CZMP. Does the CZMP contemplate that there
12 won't be development on barrier islands?

13 A: No, it does not.

14 Q: Okay. So what -- so since it's talking about
15 that there are the dynamic and fragile nature of
16 this coastal resource and the resource value of
17 it, what's the point?

18 A: It's a management technique.

19 Q: Okay. And can you flesh that out a little bit
20 more?

21 A: It's our interpretation that these policies,
22 though broadly written, are management
23 techniques to manage the potential effects to
24 coastal resources, which could be things that
25 we've talked about, barrier islands, critical



1 area, coastal resources, threatened and
2 endangered species. They're just management
3 techniques to lessen the effects is the way we
4 interpret them.

5 Q: Okay. So if something is fragile and of a
6 dynamic nature, there is additional policy
7 considerations in that decision-making matrix?

8 A: Yes.

9 Q: Okay. Now, you had given a -- done exactly what
10 I had asked you to and gave a summary, but it
11 was maybe a little more summary than I had
12 wanted in terms of the three factors under this
13 particular policy assessment. If you could go
14 into some more detail on the dune areas analysis
15 that you also made to, as well as anything else
16 that you have on barrier islands as part of your
17 analysis in summary and explanation, I'd
18 appreciate that.

19 A: Well, the dune areas is those areas that are --
20 as it relates to the policies are outside the
21 critical area. So dune areas that are landward
22 of the critical area jurisdictional baseline and
23 setback line, that's what we're talking about.
24 We're talking about dune areas landward or
25 inland from that that happen to be dunes.



1 Q: Okay.

2 A: This spit just happens to be dunes. There's
3 other portions of the South Carolina coast that
4 have dunes that are not in our direct authority.
5 The General Assembly felt like we should have
6 some input on what those areas -- what happens
7 to those areas. If they didn't, this wouldn't
8 be ---

9 Q: This section ---

10 A: --- this policy would not be here.

11 Q: Or for that matter, the whole concept of a
12 Coastal Zone Consistency ---

13 A: That's true.

14 Q: --- Certification Decision wouldn't exist, is
15 that correct?

16 A: That's true.

17 Q: Okay. Now, you have also indicated on your
18 staff assessment that policy number thirteen on
19 stormwater management was also taken into
20 account in your decision and in -- I don't want
21 to put words in your mouth, but if you could,
22 just tell The Court why did you consider that to
23 be relevant to a CZC Cert Decision?

24 A: Well, the stormwater policies actually read more
25 like regulations in the CZMP based on distance



1 from the receiving water body. So if you're
2 within a half mile, there are certain retention
3 requirements; if you're within a mile of a
4 receiving water body, there are less retention
5 requirements. They met that. Then the NPDES
6 stormwater program that Shannon Hicks manages
7 out of the -- out of our office has more
8 technical, you know, review to make sure -- to
9 ensure that those systems are going to work as
10 designed.

11 Q: Uh-huh.

12 A: That's what she does.

13 Q: Okay. And as a summary of your testimony, would
14 it be fair to say what she -- what she presented
15 as to what was in the permit application
16 satisfied the -- with regard to stormwater
17 satisfied the CZC ---

18 A: That's correct.

19 Q: --- policy? Okay. Now, under your staff
20 analysis, you also have a section with a couple
21 of subsections called special management areas
22 and, particularly, geographic areas of
23 particular concern regarding threatened or
24 endangered species' habitats. Explain, please,
25 how you applied that policy to your decision.



1 A: Well, when we conducted the GIS review, there
2 are data layers that tells us what's going on on
3 a piece of land and, in this instance, there was
4 the piping plover data layer, so that's what
5 triggered that consideration of that GAPC, that
6 there had been, you know, a state park, for
7 example, that -- state parks are GAPCs. If
8 there had been a state park there, that would
9 have been triggered. But just threatened and
10 endangered species layer was triggered and
11 that's why we considered it as -- why we had to
12 analyze it.

13 Q: Okay. Now, what makes it within your sphere of
14 consideration as far as what makes the cut?
15 What makes the list as a threatened or
16 endangered species?

17 A: That very thing. Whether they are threatened
18 and endangered.

19 Q: As identified by the ---

20 A: Fish and Wildlife.

21 Q: --- endangered species -- well, Endangered
22 Species Act?

23 A: That's right.

24 Q: Okay. And the -- would the state list of
25 endangered species also be within your purview



1 as well, in making that decision?

2 A: Yes.

3 Q: Okay. So other than the piping plover and you
4 also mentioned the sea turtles before, were
5 there any other endangered species that were
6 taken into account in this certification
7 decision?

8 A: No.

9 Q: Now, the next subsection under special
10 management areas that you addressed was beach
11 and shoreline access. Could you please address
12 that section of your CZC staff assessment?

13 A: We basically just focused on the existing access
14 at Charleston -- at Charleston County's
15 Beachwalker County Park, how they'll -- how the
16 public will continue to be able to use those
17 areas and then -- or use that particular
18 designated public access to go wherever it is
19 they would go, you know, on the beachfront.

20 Q: Uh-huh.

21 A: And there was no interference with that
22 continuing and there was a letter written by Tom
23 LaWar back in the day that said that it would
24 not impact their ability to function.

25 Q: Okay. Now, subsection (c) under the section



1 guidelines for the evaluation of all projects,
2 my recollection was that Ms. Armstrong's focus
3 was only on subsection (7), which I don't think
4 is -- it is -- I need to go over your answers
5 because I heard what you said. Is there any
6 other analysis in the guidelines for the
7 evaluation of all projects that you were not
8 asked about on -- I think it's kind of cross-
9 examination earlier, but anyway, that you have
10 not mentioned to The Court?

11 A: I think we've talked about in some -- talked
12 about all of them in some way or -- in some
13 manner or other today. Maybe with the exception
14 of number ten, which is the national interest.
15 And we struggle with that one all the time as to
16 what might be and what might not be in the
17 national interest.

18 Q: Okay. And what was your conclusion in this
19 instance?

20 A: Our conclusion is is that these projects in the
21 South Carolina coastal zone may not rise to the
22 level of national interest. The ones offshore
23 that we're looking at probably would.

24 Q: Okay. Now, on the last two pages of your staff
25 assessment, you put eight special conditions.



1 Those are the same special conditions that were
2 in the CZC certification submission?

3 A: That's correct.

4 Q: Okay. Now, this may have been addressed in the
5 2009 trial, I don't know, but I don't remember
6 that it came up specifically here and that is if
7 you could for The Court explain the difference
8 between what a certification -- CZC
9 Certification is and a critical area permit is.

10 A: Critical area permit, simply put, is our direct
11 authority.

12 Q: Okay.

13 A: The CZC Certification is those areas that are
14 not in the critical area, but in the coastal
15 zone, which is much larger than the critical
16 area. That's our indirect authority.

17 Q: Okay. Now, shifting gears a little bit to the
18 delineation of critical areas, Ms. Armstrong had
19 asked you, and I'm not sure if she asked it this
20 way, but you have marked critical areas in the
21 past?

22 A: Yes.

23 Q: Okay. And what was the context? What was your
24 role at DHEC when you did that?

25 A: I was a critical area project manager at the



1 time.

2 Q: Okay. And did you do -- do you have an idea of
3 how many critical area lines you would have
4 marked?

5 A: I was a project manager for nine years, I think,
6 so maybe ten a year.

7 Q: Okay.

8 A: Maybe. On average.

9 Q: Now, you said you were a project manager.
10 Weren't you also wetlands permitting section,
11 head of wetlands permitting section?

12 A: I was mostly critical area permit -- critical
13 area section manager, much like Blair is today.

14 Q: Okay. Okay. And when you would say you would
15 go out and mark the line or the meandering line,
16 whatever it is, for where the delineation is
17 between critical area and upland, what happened
18 after that?

19 A: A surveyor or other licensed professional would
20 take -- would go pick up those -- not pick them
21 up physically, but register them on a, you know,
22 today would be a GPS unit. Back then I'm sure
23 it was with, you know, survey rods and, you
24 know, that kind of thing.

25 Q: Okay.



1 A: But place them on a plat basically. Georectify
2 them and put them on a plat.

3 Q: And is -- were you here with the testimony about
4 the handheld GPS units?

5 A: Yesterday, yes.

6 Q: Okay. Okay. Is that what we're talking -- is
7 that what you're talking about when you said a
8 surveyor goes out with a GPS?

9 A: Somewhat.

10 Q: Well, what's the difference?

11 **MS. ARMSTRONG:** Objection, Your Honor, I'm not sure
12 that this witness has been qualified to explain
13 what the difference is between different GPS
14 units.

15 **THE COURT:** I'll sustain at this time.

16 **MR. CHURDAR:** Well, then that wasn't the intent of my
17 question is to have him talk about GPS units, so
18 -- I mean, excuse me, to give an expert opinion.

19 Q: What I'm asking is, do you know what the
20 surveyor -- the surveyors that worked with you
21 would do with that data?

22 **MS. ARMSTRONG:** Objection, Your Honor, I don't know
23 that he's -- he can testify from his own
24 personal knowledge, but he doesn't know what a
25 survey -- he can't testify what a surveyor does.



1 **MR. CHURDAR:** Your Honor, okay. I'll lay a little
2 bit of foundation.

3 **THE COURT:** Okay.

4 Q: When you collected data -- excuse me, when you
5 went out and made points out to establish what
6 the critical area delineation is, did you work
7 with surveyors?

8 A: In the sense that they collected the, you know,
9 the infield information and placed it on a plat
10 ---

11 **MS. ARMSTRONG:** Objection, Your Honor. I don't know
12 -- this witness is not testifying from his own
13 personal knowledge about what a surveyor does
14 that I've heard. I don't think there's any
15 foundation laid for that.

16 Q: Did you ---

17 **MR. CHURDAR:** I'm sorry.

18 **THE COURT:** No, go ahead.

19 **MR. CHURDAR:** Okay.

20 Q: Mr. Joyner, did you have conversations with
21 surveyors as to what they did with your data?

22 A: Conversations?

23 Q: Communications.

24 A: Communications, yes, I would say yes.

25 Q: Okay. And as a result of that, do you know,



1 could you tell The Court, what happened with the
2 data that you ---

3 **MS. ARMSTRONG:** Objection, Your Honor. He's
4 testifying -- he's trying to get hearsay in
5 about what basically the surveyor may have told
6 him that they did with the data and he doesn't
7 know.

8 **THE COURT:** I think what Mr. Walker used on Ms.
9 Armstrong was backdoor hearsay. You're
10 backdooring it in.

11 **MR. CHURDAR:** Okay. Fair enough.

12 **THE COURT:** I'm going to do the goose and the gander
13 thing.

14 **MR. CHURDAR:** I understand.

15 **THE COURT:** So what hurt you earlier helps you now.
16 Go ahead.

17 Q: Mr. Joyner, were here -- you heard Dr. Porcher
18 testify yesterday about -- about I believe his
19 word was critical habitat in the tidelands?

20 A: Yes.

21 Q: Okay. He talked about -- one of the things that
22 he talked about with tidelands was a king tide
23 and how far up a king tide would go. And, in
24 particular, his opinion that he rendered was
25 that as high up as a king tide went was part of



1 the tidelands -- or, excuse me, particularly an
2 integral part of the estuarine system was in
3 particular what he said. Now, what is your
4 opinion about a king tide and an integral part
5 of the estuarine system? Do you agree with that
6 opinion?

7 **MS. ARMSTRONG:** Objection, Your Honor. First of all,
8 Mr. Churdar's mischaracterizing a witness's
9 testimony from yesterday. And second, he's
10 asking for an opinion and first, Mr. Joyner has
11 not been qualified as an expert to give opinions
12 on what the extent of -- he's asking for a
13 scientific opinion basically. It's not how we
14 apply the regulations; it's a scientific
15 opinion. This Court's qualified agency
16 witnesses regularly in scientific areas to give
17 opinions, but that has not been done in this
18 case.

19 **THE COURT:** All right. First of all, I don't think
20 he misquoted him because I've got notes that are
21 pretty well close to that effect. But,
22 secondly, he can't -- he can give opinions as to
23 how OCRM used the law and applies the law, but
24 he can't give scientific opinions unless indeed
25 he is qualified as an expert.



1 **MR. CHURDAR:** Okay. I ---

2 **THE COURT:** There's a distinction there.

3 **MR. CHURDAR:** Okay. And I understand that.

4 Q: Okay. Mr. Joyner, do you have knowledge as to
5 how the Department has applied that particular
6 section of the definition of tidelands that
7 deals with being an integral part of an
8 estuarine system? Do you have knowledge of how
9 that's been applied in the past by the
10 Department?

11 A: Yes.

12 Q: Okay. And would the extent to which a king tide
13 goes up into, as Dr. Porcher would describe, a
14 slough to the extent that it goes up in there,
15 the upper most extent of a king tide, has it
16 been the Department's policy or interpretation
17 of the regulatory definition of tidelands to say
18 that is an integral part of the estuarine
19 system?

20 A: Not necessarily.

21 Q: Okay.

22 **MR. CHURDAR:** Can I have just a second, Your Honor?

23 **THE COURT:** Okay. Ah, second's up.

24 **MR. CHURDAR:** Well, maybe 30.

25 **THE COURT:** Okay.



(Off the record discussion.)

MR. CHURDAR: That's all my questions.

THE COURT: Okay. Re-direct?

MS. ARMSTRONG: Yes, Your Honor, thank you.

MR. JOYNER - RE-DIRECT EXAMINATION BY MS. ARMSTRONG:

Q: Curtis, how often do we have king high tides?

A: I don't know.

Q: That's fine. With respect to Beachwalker Park, you understand that the parks in the Charleston Parks and Recreation Commission holds a lease from KDP to lease the Beachwalker Park?

A: Yes.

Q: And are you aware that the developer has been in discussions with PRC about moving the location of the park?

MR. WALKER: Objection. It's not in evidence. Not going to be in evidence.

THE COURT: Are you aware ---

MR. WALKER: It suggests that is it a fact and asking whether he's aware of this fact that's not a fact.

THE COURT: I think it -- the way you asked it did assume a fact.

MS. ARMSTRONG: Okay. I'll ask it a little differently.



1 **THE COURT:** I think you can.

2 Q: Do you know whether the developer has had
3 discussions with -- do you know whether the park
4 and the developer have had discussions about
5 moving the location of the park?

6 A: I've heard about it.

7 Q: And do you know whether the park would like to
8 have park space in fee simple?

9 A: That I don't know.

10 Q: When you pulled up the piping plover data layer,
11 do you remember talking about that?

12 A: Yes.

13 Q: What did it show in the area of Captain Sam's
14 Spit, do you recall?

15 A: That it was located on the beach facing out --
16 or beach face primarily. Oceanward to the
17 baseline.

18 **MS. ARMSTRONG:** Can you put back. Do you ---

19 **(Petitioner's Exhibit Number 29 was introduced into**
20 **the record at this time.)**

21 Q: I'm right now I'm putting on the screen what's
22 been marked as Petitioner's Exhibit Number 29.
23 Is this one of the data layers that you've seen,
24 Curtis?

25 A: Yes.



1 Q: And do you know where the information on this
2 drawing comes from?

3 A: From other agencies, like the county lines comes
4 from the counties, for example. The GAPC's
5 layers come from those agencies that are
6 responsible for those resources, so the piping
7 plover data layer probably came from Fish and
8 Wildlife.

9 Q: Okay. And do you know who generated this image?
10 Is it something that the agency created using
11 its data layers?

12 A: It looks like ours. When I perform one, I put
13 a title on it, you know, the developer's name
14 and the -- the applicant's name and the CZC
15 number, so I don't know that I did this one, but
16 I would imagine Tara did.

17 Q: Is this -- does it look like -- appear to be
18 from the ArcGIS System that the Department
19 utilizes?

20 A: Yes.

21 Q: And does it indicate the location of the
22 proposed sheet pile wall on this design?

23 A: Yes.

24 Q: And where is the location of the proposed sheet
25 pile wall with respect to what's designated as



1 piping plover habitat?

2 A: The polygon that represents the piping plover
3 habitat seems to go inland and into the Kiawah
4 River, in that location.

5 Q: So does the designated piping plover habitat
6 encompass the sheet pile wall?

7 **MR. WALKER:** Objection. The designation's determined
8 by federal regulation. This is an illustration
9 that we will demonstrate is incorrect, so that
10 assumes a fact that's incorrect as a matter of
11 law.

12 **MS. ARMSTRONG:** This is -- I think Mr. Joyner's
13 testified that this appears to be something that
14 was created from the Department. They've got
15 the data layers from Fish and Wildlife Service
16 that show the piping plover habitat ---

17 **THE COURT:** Well, he said he didn't prepare it, that
18 it was -- probably, he said probably, I forgot
19 the way he used it, Tara somebody probably
20 prepared it. So, I don't know how -- this is --
21 at this point in time, you're not offering at
22 this point in time, but it's not sufficient that
23 the Department utilized it. He didn't testify
24 he utilized it.

25 **MS. ARMSTRONG:** He testified that he utilized the



1 data layer from their ArcGIS.

2 **THE COURT:** Well, we need more ---

3 Q: When you ---

4 **THE COURT:** He didn't testify he used this one.

5 **MS. ARMSTRONG:** Right, okay.

6 Q: Does this piping plover habitat data layer look
7 similar to the data layer that you observed when
8 you were looking at this information when you
9 were conducting your review?

10 A: I really don't remember.

11 Q: Mr. Joyner, Mr. Churdar was asking you about the
12 conditions that you placed on your certification
13 decision. Do you have that in front of you,
14 that decision document?

15 A: Yes.

16 Q: In looking at condition number six, those
17 requirements are incorporated into condition
18 number six, those are required as a result of
19 the development agreement between the town of
20 Kiawah Island and the developer, isn't that
21 correct?

22 A: That's correct.

23 Q: And the condition number seven regarding the
24 conservation easement, that's also required
25 under the development agreement between the Town



1 and the developer, correct?

2 A: That's correct.

3 Q: Okay. So those would have to be done regardless
4 of the conditions, correct?

5 A: That's correct. We just wanted to ensure that
6 they were, you know, as part of our state
7 permit.

8 Q: And if you could, look back again at Exhibit
9 Number 28 that was introduced earlier and do you
10 have that exhibit up there? Might be easier for
11 me to grab it for you.

12 A: Yes.

13 **(Petitioner's Exhibit Number 28 was introduced into**
14 **the record at this time.)**

15 Q: If you could, flip over to the last page, page
16 three of that document. Page three of Ms.
17 Hicks' notes that have been introduced into
18 evidence. She indicates that the guidance from
19 the Board is on -- we've been discussing earlier
20 the guidance earlier. Mr. Walker I believe
21 asked you whether that was related to just only
22 Cape Charles or others and you said others, but,
23 in fact, the Board gave direction according to
24 this exhibit specifically with Cape Charles that
25 the staff was to be pro development and private



1 property -- or property rights, isn't that
2 correct?

3 A: Unfortunately, it looks like it's correct.

4 Q: You also, in talking about some of the
5 conditions, condition number five was to lessen
6 the effects on sea turtles, and that was related
7 to whole life, correct?

8 A: Yes.

9 Q: Now, the certification decision that we're
10 talking about now allows 26 houses to be built
11 on the spit, correct?

12 A: That's my understanding, yes.

13 Q: But there's nothing in your certification
14 decision that placed any kind of limits on the
15 lights and the lighting that would be used in
16 connection with those houses and the driveways
17 and the lights associated with development, is
18 there?

19 A: Well, I tend to disagree. It says included
20 associated with habitable structures and all
21 landscape lighting. Must be directed downwards.
22 So, I think that's the limitation.

23 Q: So that all the houses ---

24 A: With the restrictions ---

25 Q: Right.



1 A: Restriction, I should say.

2 Q: But you're familiar with the lights out sea
3 turtles bumper stickers that we see up and down
4 the coast, aren't you?

5 A: Yeah.

6 Q: And the reason that we have those lights out sea
7 turtles is because we're trying to encourage
8 people not to have lights on when they're on the
9 beach because it confuses the baby turtles when
10 they hatch, correct?

11 A: Correct.

12 Q: And they get confused and they don't go out to
13 the ocean, they come towards the houses where
14 they see the light, right?

15 A: That's my understanding.

16 Q: And that, in fact, was one of the concerns that
17 was expressed to you by the resource agencies
18 when they discussed impacts to sea turtles,
19 correct?

20 A: That's correct.

21 Q: Curtis, does OCRM consider part of its role as
22 managing coastal resources?

23 A: I believe so.

24 Q: And does coastal resources include wildlife
25 resources?



1 A: I believe that it's those that are threatened
2 and endangered. I don't know about all
3 wildlife.

4 Q: So shrimp that utilize the marsh, would they be
5 a wildlife resource that is protected by -- as
6 a coastal resource?

7 A: Yeah, I think indirectly through, you know, the
8 -- you know, water quality practices that we
9 have to require and things that protect water
10 quality or at least hold the line on water
11 quality in that sense, yes.

12 Q: Because when we were -- I want to talk a little
13 bit more, more broadly about coastal resources
14 because I thought what you said earlier was you
15 talked about the different kinds of marine life
16 and wildlife that you would consider under that
17 ambit and I'm just trying to make sure after Mr.
18 Churdar asked you some questions about applying
19 the Wildlife and Fisheries Resource Policies
20 that we were clear that wildlife is something,
21 shrimp, crabs, oysters, those things are coastal
22 resources, right?

23 A: Yeah, I think -- I think they are in the sense
24 that -- what I meant with the, you know, why we
25 didn't review the wildlife policies is simply



1 because they're not doing wildlife management on
2 the property. That policy seems to be geared
3 towards what DNR does on their lands or, of
4 course, some large, you know, land owner that's
5 managing a wildlife -- you know, doing active
6 management.

7 Q: But you don't disagree that OCRM has management
8 authority over coastal resources?

9 A: No, I do not.

10 Q: And would diamond back terrapins be a wildlife
11 resource?

12 A: I would assume so. I don't know that they're
13 endangered ---

14 Q: I'm not talking about ---

15 A: --- sitting here today.

16 Q: Sure. I'm talking about generally, coastal
17 resources and specifically -- I think -- would
18 you agree that wildlife resources are one of the
19 coastal resources under the bounty of coastal
20 resources that we have?

21 A: Yeah, I think we would consider that.

22 Q: And would dolphins also, would they be a marine
23 resource or wildlife resource?

24 A: I think, again, the first threshold for me would
25 be whether they're threatened and endangered.



1 Then, if not, then it would rise to some level
2 of coastal resource.

3 Q: They are wildlife, right?

4 A: Yes.

5 Q: They're a marine species, right?

6 A: Yes.

7 Q: And shore birds, would those also be wildlife
8 resources?

9 A: They're wildlife resources.

10 Q: I don't have any other questions.

11 **MS. ARMSTRONG:** Thank you, Your Honor.

12 **MR. WALKER:** Your Honor, may I have -- may we take a
13 short break for just one thing?

14 **THE COURT:** Yes, we can take a short break.

15 **MR. WALKER:** Thank you.

16 **THE COURT:** Five minutes?

17 **MR. WALKER:** That's fine.

18 (A break was taken from 3:43 p.m. until 3:51 p.m.)

19 **THE COURT:** Ready?

20 **MR. WALKER:** Ready to proceed, Your Honor. First,
21 I'd like to thank you for giving me the time to
22 find this.

23 **MR. JOYNER - RECROSS-EXAMINATION BY MR. WALKER:**

24 Q: Mr. Joyner, you're aware, are you not, that it's
25 the Department of Interior or U.S. Fish and



1 Wildlife Service of the Department of Interior
2 that establishes designating critical habitats
3 for rare and endangered species ---

4 A: Yes.

5 Q: --- threatened and endangered species? Fish and
6 Wildlife and the Department of Interior would
7 have established or did establish the designated
8 critical habitats for wintering piping plovers,
9 did they not?

10 A: That's correct.

11 Q: Including the designated critical habits in
12 South Carolina or along the coast of South
13 Carolina, correct?

14 A: Correct.

15 Q: All right. Now, I'm going to show you a federal
16 register. What we've got on the screen here is
17 the federal register from July 10, 2001, and
18 it's 50 C.F.R. part 17, endangered and
19 threatened wildlife and plants final
20 determinations and critical habitat for
21 wintering piping plovers final rule. Do you see
22 that?

23 A: I do.

24 Q: Would you consider that -- or you would consider
25 that, would you not, the ultimate authority on



1 the designation of the habitat?

2 A: I consider it law.

3 Q: It's good law.

4 A: The law.

5 Q: It is the law. All right. I'm going to move to
6 a couple of highlighted pages and, Dave, if you
7 could -- there we go. And you'll see here that
8 the service has a discussion within the reg in
9 order to capture the dynamic nature of the
10 coastal habitat and the intertidal areas used by
11 the piping plover, we have textually described
12 each unit as including the area extending out
13 from the landward boundaries to the MLLW. And
14 what would you understand MLLW to be?

15 A: Mean Low Low Water.

16 Q: All right. And by textual, would you understand
17 that to be wording, text, written text?

18 A: Yes.

19 Q: And then it also goes on in this section to say,
20 thus, to best ensure that areas considered
21 essential to the piping plover will remain in
22 the designation over time. Our textual unit
23 descriptions will constitute the definitive
24 determination as to whether an area is within
25 the critical habitat boundaries. Did I read



1 that correctly?

2 A: Yes.

3 Q: So really what it's saying is if there's any
4 doubt, we look to the text?

5 A: Correct.

6 Q: Correct. All right. Now, let's go to the next
7 highlight on the reg. This is page 36067, thank
8 you, Dave. And it says these unit descriptions
9 can be found in the regulatory section at the
10 end of this rule. And, again, it says the
11 definitive source for determining the critical
12 habitat boundaries. So we can agree it's the
13 text that absolutely governs, correct?

14 A: Correct.

15 Q: Now, I want us to go to S.C. Unit 10, which is
16 the unit we're talking about here, if you could
17 mark that. S.C. Unit 10. The Seabrook Island
18 venue. 111, I guess HA is hectares, I don't
19 know. 290 acres in Charleston County. This
20 unit runs from just .16 kilometer, a tenth of a
21 mile from north of Captain Sam's inlet to the
22 southwest. So the southwest is towards
23 Seabrook, correct?

24 A: Correct.

25 Q: Along the Atlantic shoreline. It includes land



1 barriers from MLLW on the Atlantic Ocean to
2 where densely vegetated habitat not used by
3 piping plover begins and where the constituent
4 elements no longer occur. Most of this unit is
5 privately owned. So does any portion of this
6 project within a tenth of a mile north of
7 Captain Sam's inlet?

8 A: Yes.

9 Q: What portion of it?

10 A: Tenth of a mile. Tenth of a mile north of
11 Captain Sam's inlet.

12 Q: One tenth of a mile?

13 A: One tenth of a mile. I have to assume it's part
14 of the spit. I don't know that it's all of it.

15 Q: Well, can't we agree that if there's no part of
16 the project within the constituent elements ---

17 A: Uh-huh.

18 Q: --- within a tenth of a mile north of the inlet,
19 that it's -- no portion's in the critical
20 habitat? It certainly doesn't run all the way
21 to Beachwalker, does it?

22 A: No.

23 Q: So it only goes a tenth of a mile from the
24 inlet?

25 A: Which is not very far.



1 Q: 528 feet or something like that?

2 **THE COURT:** How many feet are in a mile?

3 **MR. WALKER:** 5,280.

4 A: Yes, that's a mile.

5 Q: You would agree, no portion of the project is
6 within 528 feet -- these 26 lines are within 528
7 feet of the inlet?

8 A: Yeah, I would agree with that.

9 **MR. WALKER:** Thank you, Your Honor.

10 **THE COURT:** Mr. Churdar?

11 **MR. JOYNER - RECROSS-EXAMINATION BY MR. CHURDAR:**

12 Q: Mr. Joyner, I just have a question or two
13 following up on the section seven that Ms.
14 Armstrong asked you about in the CMP involving
15 wildlife and fisheries management. Do you have
16 this with you? I'm on chapter three, page 51.

17 A: I have the -- the act, sir.

18 Q: How about if I let you read ---

19 A: That's fine.

20 Q: --- and I could have you read the management
21 authority section outloud.

22 A: The management authority for Wildlife and
23 Fisheries Management, which is policies that
24 we've been talking about, it says -- this is an
25 older version, but it says the South Carolina



1 Wildlife and Marine Resources Department, which
2 is now DNR, is the principle state agency with
3 statutory authority for the protection,
4 management, conservation of wildlife and marine
5 resources, including fish, game, non-game, and
6 endangered species.

7 Q: Okay. And is that -- you said this is an old
8 section, but, I mean, that's still the
9 management policy?

10 A: That's correct.

11 Q: Okay. And so ---

12 A: I just meant to say that DNR is now the wildlife
13 and fisheries ---

14 Q: Okay, I understand.

15 A: --- marine resources.

16 Q: Okay. And so the Department looks to DNR for
17 guidance on any wildlife issues that might crop
18 up with regard to a CZC certification?

19 A: Correct. What you're describing is what we call
20 a network program. The CZMP is a network
21 program with other state and federal agencies
22 and, thus, their conduit -- when a project is
23 in-house, that's their conduit to provide
24 comments.

25 Q: Okay.



1 A: Otherwise, there's no one to provide a comment
2 to.

3 Q: And there is no -- it would be fair to say
4 there's no possible way that the Department
5 could manage wildlife habitat, correct?

6 A: Correct. It's not our -- it's not in our
7 statutory authority to do so.

8 Q: Right, right, because we look to DNR for
9 guidance on that. So if this particular
10 section, section seven, that we're talking
11 about, we have not gotten any input from DNR,
12 for instance, on diamondback terrapins, you
13 would consider that policy inapplicable to your
14 decision, correct?

15 A: (No audible response.)

16 Q: Well, let me ask it this way. Did you consider
17 that policy?

18 A: No.

19 Q: Okay. And is that because we didn't have any
20 input from DNR in this instance regarding
21 diamondback terrapins?

22 **MS. ARMSTRONG:** Objection, Your Honor, I believe Mr.
23 Churdar's phrasing the question we didn't have
24 any input. I mean, I'm not sure, I mean, is he
25 talking about the Department; is he talking



1 about himself? Who's he ---

2 **MR. CHURDAR:** I should not say we.

3 **THE COURT:** Rephrase it.

4 Q: Did the Department?

5 A: I was not aware of the diamondback terrapin
6 until yesterday ---

7 Q: Okay.

8 A: --- on this site.

9 Q: Okay.

10 A: That's not to say that it doesn't exist or they
11 don't exist.

12 Q: I understand. But for purposes of the Coastal
13 Zone Consistency Certification decision, that
14 was not on your radar screen in terms of how you
15 made the decision?

16 A: No.

17 Q: Okay. And in particular, the applicability of
18 section seven regarding wildlife and marine
19 fisheries management, correct?

20 A: Correct.

21 Q: Okay. Thank you.

22 **THE COURT:** Done?

23 **MR. CHURDAR:** I'm done. Thanks.

24 **THE COURT:** Unless they raise new matter, I ---

25 **MS. ARMSTRONG:** No, I don't have anything.



1 THE COURT: Okay. You can step down.

2 MS. ARMSTRONG: Your Honor, I'd like to release Mr.
3 Joyner. He's under subpoena.

4 THE COURT: You're released.

5 MR. JOYNER: I stand released.

6 (The witness was excused.)

7 THE COURT: Is that it for today?

8 MR. WALKER: We have a witness, Your Honor.

9 THE COURT: Oh, that's right.

10 MR. WALKER: Yes, a witness that we'd like to do if
11 we can do this witness today. Dr. Kana's ready
12 to go at 9:00 in the morning on Monday.

13 THE COURT: Oh, okay.

14 MR. WALKER: And I believe we're going to have a
15 quick motion, too.

16 THE COURT: Okay. Well, are you ---

17 MS. ARMSTRONG: Yeah, petitioner rests.

18 THE COURT: Rests, okay. Well, then motion away.

19 MOTION TO NARROW ISSUES:

20 MR. WALKER: At this time, the respondent, KDP, would
21 move to narrow the issues. Based on the
22 petitioner's case, the petitioner has not put up
23 any proof to challenge the water and sewer
24 permits. There's been no proof that the water
25 and sewer permits were in any way improperly



1 issued. We'd also say the same about the
2 stormwater. As we see this, it's entirely a
3 case about the consistency determination. Now,
4 we understand that if the project is deemed
5 inconsistent, that maybe those permits --
6 everything gets unwound, but in terms of the
7 proofs that we're required to put up, there was
8 nothing to rebut essentially the validity of
9 those permits. I just didn't hear it.

10 **THE COURT:** All right.

11 **MR. WALKER:** Nor the technical requirements. Nobody
12 said the stormwater is insufficient. There was
13 nothing for the water system or the sewer
14 system.

15 **THE COURT:** All right. Mr. Churdar?

16 **MR. CHURDAR:** Your Honor, just briefly piggybacking
17 on what Mr. Walker said, in particular, the
18 NPDES permit coverage regulation is 61-9, I
19 don't even think that regulation has been
20 mentioned this entire trial. And regulation 72-
21 300 regarding stormwater management. And then
22 with regard to the water supply construction
23 permit and the wastewater construction permit,
24 regulations 61-67 and then 61-58. Again, those
25 haven't been mentioned and, in fact, if you look



1 at the pre-hearing statement, what has been
2 focused on in the pre-hearing statement, we have
3 A through F as far as legal authority for the
4 challenge and the CMP is mentioned one, two,
5 three, four times, and then South Carolina Code
6 48-39-150, 48-39-30, are mentioned. But
7 otherwise, it's the CMP. And so the technical
8 requirements that are needed to make a decision
9 about whether the NPDES permit was covered, was
10 properly issued, as well as the other two
11 permits just simply hadn't been a factor and
12 I've already overlapped with what Mr. Walker
13 said ---

14 **THE COURT:** Okay.

15 **MR. CHURDAR:** --- but I just wanted to add a few
16 things.

17 **THE COURT:** All right.

18 **MS. ARMSTRONG:** Just looking at the decision
19 documents themselves, it's Exhibit Number 6,
20 it's all -- they all were issued together on the
21 same date. There's NPDES covered wastewater and
22 water supply permits and the Coastal Zone
23 Consistency Certification, all of those permits.
24 So those three permits are the underlying basis
25 for how the Department even had authority to



1 review those three permits for consistency with
2 the Coastal Management Program, another word for
3 Coastal Zone Consistency Certification decision.
4 So, those three permits formed -- I don't know
5 how much more simpler I can say it than they
6 form the underlying basis for the certification
7 decision that we're here about today because,
8 you know, that's -- I certainly think that this
9 Court could take that up. The Court could
10 affirm a permit, but deny the certification.
11 And if there's no certification, we would assert
12 that the permits are not valid. So you can't
13 really have one without the other because 48 ---

14 **THE COURT:** Well ---

15 **MS. ARMSTRONG:** --- 48-39-80 requires all these
16 permits to have certification for consistency
17 before they proceed forward, so in our ---

18 **THE COURT:** As far as the issues, though, for which
19 there is under those permits, then nothing's
20 been presented concerning the words sewer. I'd
21 have to hear from you on stormwater.

22 **MS. ARMSTRONG:** Yeah, I think there's testimony about
23 the water lines and the sewer lines and that
24 there would be -- that they would be impacted.
25 And those are things that could fall into the



1 critical area if there's a failure of some sort,
2 as would the road.

3 **THE COURT:** But there's been ---

4 **MS. ARMSTRONG:** And the road is part -- go ahead.

5 **THE COURT:** There's been no evidence presented
6 concerning their potential failure. I mean,
7 this is an involuntary non-suit approach, so
8 that's all -- I'm not concluding you can present
9 everything you've already put evidence on, I
10 assure you. But I haven't heard anything on the
11 inadequacy of the water and sewer or the NPDES
12 permit. I'd have to hear you tell me about if
13 anything's been presented on stormwater, but --
14 so, let me just start with those first two. I
15 don't ---

16 **MS. ARMSTRONG:** Yeah, so I would ---

17 **THE COURT:** Factually, is what I'm looking at. I'm
18 not precluding you from challenging the overall
19 permits by any means. It's just factually on
20 those two areas, I'm worried about.

21 **MS. ARMSTRONG:** Right, so I guess I would -- I would
22 agree that we are not challenging the technical
23 sufficiency of those ---

24 **THE COURT:** Two things.

25 **MS. ARMSTRONG:** --- those decisions. If more -- it's



1 the larger piece that we're noticing. They
2 certainly play into the impact if you're going
3 to have a water pump, a sewage treatment water
4 pump, I think -- what is it called, pump
5 station, on the property. And so as far as
6 that's related to cumulative impacts that the
7 agency could look at. But I concede that there
8 are -- the technical sufficiency isn't something
9 that's being challenged.

10 **THE COURT:** Okay.

11 **MR. WALKER:** And, Your Honor, just -- that would just
12 be helpful because ---

13 **THE COURT:** That's where I think I can ---

14 **MR. WALKER:** I'd have to bring a witness -- we can
15 cut out several hours of testimony if we don't
16 have to ---

17 **THE COURT:** Well, I'm going to go with her phrase
18 technical sufficiency, does that ---

19 **MR. WALKER:** Yeah.

20 **THE COURT:** --- because I ---

21 **MR. WALKER:** I think that's really where we're headed
22 on this. We understand on the consistency
23 determination it's sort of wide open on that,
24 but we just don't want to impose on The Court
25 and everybody else to have these witnesses come



1 up and say I applied this standard, I did this
2 and I did that on say the stormwater or the
3 water or the sewer.

4 **RULING OF THE COURT:**

5 **THE COURT:** All right. I'm going to grant ---

6 **MS. ARMSTRONG:** I mean, I would say we didn't ---

7 **THE COURT:** I'm going to -- I'm going to tell you
8 what I'm going to do. I'll give you one shot at
9 it, just because I want to make sure I get it
10 right. I'm granting the involuntary non-suit on
11 the technical sufficiency of the water and
12 sewer, the NPDES permit, and the stormwater.

13 **MS. ARMSTRONG:** Your Honor, I don't know if that does
14 not -- I don't understand what the purpose of
15 that would be because I mean, again, we've got
16 -- those are the permit decisions that are
17 underlying. Basically, then, you're saying that
18 these permits are valid and they can proceed and
19 we would disagree that that occurred while this
20 ---

21 **THE COURT:** Well, I'm just saying that -- I think my
22 ruling is -- the record will be clear by what
23 I'm about to say is that factually those three
24 areas have not been challenged, but as Mr.
25 Walker said, obviously, the overall cumulative



1 impacts -- is that what you phrased?

2 **MR. WALKER:** Well, if they show ---

3 **THE COURT:** --- for consistency ---

4 **MR. WALKER:** If it's inconsistent, then all the
5 permits go out the window. But they don't go
6 out for technical reasons. They go out because
7 The Court would deem them inconsistent, the
8 project inconsistent, not for technical
9 inadequacies in the way it was designed, but for
10 the project being inconsistent with ---

11 **THE COURT:** And I've heard nothing about inadequate
12 design. That's probably the phrase you should
13 have used long time ago, I would have picked up
14 on it. But because I haven't heard about
15 anything whether water, sewer, stormwater,
16 NPDES, none of that was inadequately designed.
17 Just we are sticking with consistency -- or, you
18 know, you've been presenting that the whole
19 time.

20 **MS. ARMSTRONG:** Yeah, that's certainly correct. I
21 guess I just -- we have some concern about
22 throwing out our challenges on permits that are
23 tied to a certification support for it and if
24 the concern is about, you know, as an
25 evidentiary matter whether the Department or



1 whether KDP needs to put up proof of those, we
2 would concede that we're not contesting the
3 sufficiency of the stormwater permit and design,
4 that Mr. Karkowski is planning on testifying
5 about. I mean, this is -- you know, saying --
6 stating this on the record so that we're clear
7 about things, but I really don't believe that
8 dismissing the underlying permits is going to --
9 that's not -- that's -- that's ---

10 **STIPULATIONS:**

11 **THE COURT:** That's a backdoor way of doing the same
12 thing I was going to do, but. So you would
13 stipulate that you wouldn't challenge the water
14 and sewer design, the stormwater design, or the
15 NPDES design?

16 **MS. ARMSTRONG:** Correct.

17 **MR. WALKER:** I'm fine with that with one
18 clarification just so we don't end up at odds at
19 the end of the case. The in-ground wall was
20 part of the stormwater. There hasn't been any
21 technical testimony challenging the sufficiency
22 of that wall as to whether it can be installed,
23 whether the design is adequate. There's been
24 nothing.

25 **THE COURT:** Well ---



1 **MR. WALKER:** And so I have a witness here to testify
2 to that, but there was no proof to say it wasn't
3 a good design. And so I can put that -- I don't
4 know who said it, but who, there was nobody
5 qualified, no engineer who would assess the
6 design of this wall. None. And nobody said it
7 couldn't perform its intended function. Nobody.
8 And so ---

9 **THE COURT:** I was going to dispute you at first, but,
10 the more I think about it, it's going to -- the
11 shore is going to be -- what was it, scoured to
12 the point that it reaches the wall. All right.

13 **MR. WALKER:** Well, we don't dispute that.

14 **THE COURT:** Yeah, I know. I was just thinking on the
15 fly. Go ahead.

16 **MR. WALKER:** So there's no need for me to put up a
17 witness on something where they've had no
18 technical critique of the specifics of this
19 engineered structure. This is a fully
20 engineered structure, very elaborately done in
21 terms of soils analysis, the depth, the joints,
22 the reinforcement, the helical anchors,
23 everything that's done, and nobody came in and
24 said that's insufficient.

25 **THE COURT:** That design is not sufficient.



1 **MR. WALKER:** Yeah, that that design is insufficient
2 for under the circumstances. So we don't feel
3 like any case has been made -- if she was going
4 to challenge -- I say she, if the petitioner was
5 going to challenge, they had to bring somebody
6 who was qualified to say that. Now, they've
7 done a lot of things and been very far reaching
8 in the challenge to the certification, which is
9 not the sufficiency of the wall. It has to do
10 with the location, the island dynamics,
11 wildlife, all the stuff we've heard about for
12 four and a half days. But nothing on the
13 technical sufficiency of the design of the wall.

14 **THE COURT:** Okay.

15 **MR. CHURDAR:** Your Honor, this may be splitting hairs
16 that I don't need to split, but ---

17 **THE COURT:** Well, then, let's don't do it. I can
18 solve that for you.

19 **MR. CHURDAR:** Okay. I've got two witnesses lined up
20 to come and testify about the application of the
21 regulations to these permitting decisions, these
22 three permitting decisions, and to say that the
23 design is not deficient. I mean, I don't know
24 that that means that they don't need to come.
25 I mean, I'm ---



1 **THE COURT:** Well, I can't answer that for you, so ---

2 **MR. CHURDAR:** Well, I guess, if I understand -- I'm
3 not asking you to.

4 **THE COURT:** Yeah.

5 **MR. CHURDAR:** But that's why I'm saying you may have
6 already answered it, but I'm not sure that just
7 to stipulate that the design is sufficient is
8 the same thing as saying the Department properly
9 applied the technical regulatory requirements to
10 the permit application and made the right
11 decision.

12 **THE COURT:** Well, I'll hear Ms. Armstrong on that.
13 So ---

14 **MS. ARMSTRONG:** Your Honor ---

15 **THE COURT:** --- two more things I want to hear from
16 you -- or about is what Mr. Churdar just
17 pontificated upon and secondly, the lack of
18 evidence concerning the design of the sheet
19 wall.

20 **MS. ARMSTRONG:** That's exactly what I was going to
21 address, Your Honor, so we're on the same page.
22 The petitioner bears the burden of proof in this
23 case. So if we -- we've not presented proof and
24 on whatever issues are concerning Mr. Churdar,
25 then there's no way we can prevail. We can't



1 overturn a decision unless we prevail on the
2 burden of proof and if there's been no evidence,
3 we haven't -- we agree that we've not presented
4 evidence on the technical sufficiency of the
5 wastewater and water line. So I think that ends
6 the inquiry. I don't know why it's a -- from
7 either a practical standpoint of having a
8 witness testify or the broader implications of
9 just totally dismissing permits, I think that's
10 a pretty draconian result given where we are ---

11 **THE COURT:** Well, I probably I would do that, but I'm
12 trying to decide is whether on this one since
13 there's no stipulations, I would be apt to grant
14 a involuntary non-suit regarding the issue,
15 although the problem about a voluntary non-suit
16 is I still have to do findings of fact, but I
17 guess my findings of fact would be there were no
18 findings of fact. But an involuntary non-suit
19 concerning the sufficiency of the design of the
20 steel wall, so I don't really touch anything
21 else. It's just the facts involving that wall.
22 Because, like you said, you haven't presented
23 any facts regarding it, so ---

24 **MS. ARMSTRONG:** That's -- yeah, that's not what I
25 said. I said the water line and the sewer line.



1 **THE COURT:** Oh, oh, I'm asking about ---

2 **MS. ARMSTRONG:** I think we presented evidence about
3 the wall and that gets to the second point that
4 you asked about and Mr. Walker's points. I
5 think there's absolutely been evidence about the
6 wall. The wall's going to be exposed; there are
7 going to be greater impacts imposed on that wall
8 by velocity, the water, that there's scouring
9 out in front of the wall, that it deepens the
10 channel in front of the wall. We took Ms.
11 Hayes' deposition who designed the wall and she
12 relied on a -- looked at other reports that were
13 presented to her. She's not a hydraulic
14 engineer. She's a structural engineer. She's
15 -- we definitely are going to present some
16 evidence about -- about that structure that's
17 designed and what the impacts could be that flow
18 from it and what other experts have opined about
19 what's needed to stabilize that shoreline. So,
20 that's -- we certainly intend to present that
21 kind of evidence. Now, I have -- again,
22 agreeing on the ---

23 **THE COURT:** When you say that kind of evidence, do
24 you mean you intended to cross-examine her on
25 it?



1 **MS. ARMSTRONG:** We're going to -- we've cross-
2 examined her on that, but we also -- I started
3 out by saying what evidence from my perspective
4 I see that we've presented already.

5 **THE COURT:** Yeah. Well, what evidence have you
6 already presented concerning the -- whether the
7 sheet wall was properly designed? Not -- I'm
8 not asking about the function, the resulting
9 function as far as scouring and all that, but --
10 -

11 **MS. ARMSTRONG:** So, the concerns with the latter ---

12 **THE COURT:** Okay.

13 **MS. ARMSTRONG:** --- is do I believe that Ms. Hayes is
14 an engineer that's capable of designing a wall
15 that's going to do what she says it's going to
16 do. Yeah, that's not -- we are not disagreeing
17 with her engineering -- engineering opinion.
18 The concerns are with the implications of that
19 structure in the critical area over time.

20 **COURT REPORTER:** I'm sorry, I didn't hear you.

21 **THE COURT:** The implications ---

22 **MS. ARMSTRONG:** The implications of that structure in
23 the critical area over time and the impacts to
24 the critical area and the critical area.

25 **THE COURT:** Mr. Walker?



1 **MR. WALKER:** Well, there was nobody who was qualified
2 who rendered an opinion that said if the wall is
3 exposed, under these circumstances, the wall's
4 going to fail. I mean, nobody.

5 **THE COURT:** Well, she said -- when she said
6 implications, I think she's talking about the
7 environmental implications about the loss of
8 soil and things like that, which there was
9 testimony about that.

10 **MR. WALKER:** Oh, I think that has to do with the
11 consistency determination rather than the design
12 sufficiency of the wall.

13 **THE COURT:** Anything else? You're not going to
14 stipulate on this here, are you? I'm not
15 pushing you, I'm just asking.

16 **MS. ARMSTRONG:** So I think the way you characterized
17 it just now is the way we're viewing that we put
18 up evidence about the impacts that are going to
19 result to the sediments, the ground, the
20 critical area that's in front of that wall.

21 **THE COURT:** And the environmental impacts, because I
22 added that, too.

23 **MS. ARMSTRONG:** Sure.

24 **THE COURT:** I certainly think you presented stuff
25 about the overall environmental impacts



1 resulting from the wall.

2 **MS. ARMSTRONG:** Right.

3 **THE COURT:** But -- so are you going to stipulate or
4 not?

5 **MS. ARMSTRONG:** I mean, I'm not sure -- what would be
6 the stipulation?

7 **THE COURT:** Well, my involuntary non-suit at this
8 point would be that I grant an involuntary non-
9 suit as to that there was no -- I grant an
10 involuntary non-suit regarding the design of the
11 wall, but not as to the consistency
12 determination and the issue of whether the wall
13 resulting in environmental impacts of the wall.

14 **MS. ARMSTRONG:** Your Honor, the thing I'm not sure
15 about is I don't -- a non-suit to me is the
16 case, it's not just non-suiting issues. And
17 maybe because I've never had to deal with a non-
18 suit before and, I just think it's a lack of
19 familiarity, but to me non-suits usually -- all
20 you think about is the case is gone.

21 **THE COURT:** Oh, I don't ---

22 **MS. ARMSTRONG:** If we're just, I mean, talking about
23 issues -- I don't -- I mean, non-suiting issues,
24 I'm not -- I mean, we can stipulate on the
25 record and that's what I was trying to suggest



1 that we do rather than ---

2 **THE COURT:** If you wish to stipulate all that.

3 **MS. ARMSTRONG:** That's -- I think that's what I
4 already did. That's why I said it very clearly
5 and I tried to say it clearly on the record.

6 **THE COURT:** So let me word your stipulation and you
7 stipulate that you are not challenging the
8 design of -- the technical design and
9 engineering design of the wall, but the
10 resulting environmental impact of the wall.

11 **MS. ARMSTRONG:** Correct.

12 **THE COURT:** All right. Do you accept that
13 stipulation, Mr. Walker?

14 **MR. WALKER:** Yes, Your Honor.

15 **THE COURT:** All right. Mr. Churdar?

16 **MR. CHURDAR:** That was -- I'm sorry, with regard to
17 the wall?

18 **THE COURT:** Yes, sir.

19 **MR. CHURDAR:** Just the wall?

20 **THE COURT:** Yes, sir.

21 **MR. CHURDAR:** Okay. Yes, sir.

22 **THE COURT:** All right. And then the other two
23 stipulations she did, I don't know if I asked
24 y'all if you accept those stipulations.

25 **MR. WALKER:** I'm fine. I think she said she was



1 going to stipulate that she hadn't put up a case
2 as to the design and sufficiency of the water
3 system and the sewer system, or the stormwater
4 system, but she's been consistently not
5 stipulating, we understand, to the environmental
6 implications of both systems.

7 **THE COURT:** Yeah, okay.

8 **MR. WALKER:** Is that fair?

9 **THE COURT:** Mr. Churdar?

10 **MS. ARMSTRONG:** I believe that's fair.

11 **THE COURT:** Yeah.

12 **MS. ARMSTRONG:** And my client's here. If you don't
13 mind, if I can have just a moment, I'm hoping --
14 -

15 **MR. WALKER:** Can we just take two minutes, then, and
16 both consult with our clients?

17 **MS. ARMSTRONG:** Let's take two minutes, yeah.

18 **THE COURT:** Okay.

19 (Off the record from 4:26 p.m. until 4:32 p.m.)

20 **THE COURT:** We're back on the record.

21 **MS. ARMSTRONG:** So the stipulation that the Court
22 just read and that we all just discussed is --
23 is -- I believe is in agreement with proceeding
24 that way.

25 **THE COURT:** Well, y'all've already accepted it unless



1 ---

2 MR. WALKER: No, we accept it, too.

3 RULING OF THE COURT:

4 THE COURT: Okay. All right. With all those
5 stipulations, then we'll just move forward.

6 MR. WALKER: And with that, Your Honor, since that's
7 made unnecessary at the current time, Jenn
8 Hayes, we are already starting to streamline
9 this process.

10 THE COURT: Well, good.

11 MR. WALKER: And so we ---

12 THE COURT: We'll go ahead and leave today, I guess
13 ---

14 MR. WALKER: We have Tim Kana at 9:00 on Monday.

15 THE COURT: All right. Y'all are all rewarded by
16 your stipulations by getting to leave early.

17 CLARIFICATION REQUEST:

18 MR. CHURDAR: Your Honor, could I just get
19 clarification on did you grant non-suit on ---

20 THE COURT: I didn't grant any non-suit.

21 MR. WALKER: It's a stipulation.

22 MR. CHURDAR: Okay. But the stipulation was only to
23 the sheet pile wall?

24 THE COURT: Yeah.

25 MR. CHURDAR: Well, we've got -- we've got at least



1 the water supply permit and the wastewater
2 permit. I mean, there hadn't been a ---

3 **MR. WALKER:** We understood that the stipulation was
4 was a stipulation that there wasn't any
5 challenge to the design sufficiency of the sheet
6 pile -- of the stormwater, including sheet pile
7 wall, water and sewer that we're talking about
8 environmental impacts and the consistency with
9 the CZMP.

10 **MR. CHURDAR:** I'm sorry, I thought we were just
11 talking about the sheet pile wall. I would ---

12 **THE COURT:** No, it was the sheet pile wall, the water
13 and sewer and the stormwater. The technical ---

14 **MS. ARMSTRONG:** Wastewater.

15 **MR. WALKER:** Wastewater, correct.

16 **THE COURT:** Wastewater.

17 **MS. ARMSTRONG:** Yes.

18 **MR. WALKER:** It's all of those.

19 **MR. CHURDAR:** I understand, but I would like for the
20 stipulation to be with regard to the water
21 supply permit and the wastewater permit that the
22 -- it's not just design sufficiency because I
23 believe that we can all agree that there has
24 been no evidence with regard to the application
25 of the regulations and so I believe that just to



1 stipulate to design sufficiency is not going far
2 enough.

3 **MR. WALKER:** I don't mean to take issue with Mr.
4 Churdar at all, but ---

5 **THE COURT:** Well, I was about to disagree.

6 **MR. WALKER:** All right. I don't think -- I mean,
7 we've said all day long it's not about -- this
8 is a de novo proceeding and it's not about
9 whether they were right or wrong ---

10 **RULING OF THE COURT:**

11 **THE COURT:** Well, I'm just going to make it easier
12 for everybody. I humbly deny your request.
13 I'll tell you what, since you offered, I'll hear
14 your response to that and then I'll make my
15 decision.

16 **MS. ARMSTRONG:** I feel like everything that I've
17 already said and that Mr. Walker just said is
18 enough response. I thought we had already
19 gotten to, you know, a place of agreement, so
20 I'm a little ---

21 **MR. WALKER:** I think we made substantial progress and
22 it is a stipulation and we have stipulated ---

23 **THE COURT:** Well, I mean, he can make a motion for
24 involuntary non-suit is the only route now and
25 from what I've heard, at this point in time, I'm



1 not going to grant that.

2 **MR. CHURDAR:** As to the stormwater -- excuse me, as
3 to the wastewater permit?

4 **THE COURT:** You said your point was that there's been
5 no argument or facts as to the applicability of
6 those two regulations.

7 **MR. CHURDAR:** That wasn't the context -- if we're
8 going to stipulate, I was trying to -- I thought
9 the stipulation was just on the storm -- excuse
10 me, the sheet pile wall, so if we're going to
11 stipulate, I was wanting to add to it. But if
12 you're asking for a motion for non-suit, that's
13 what I'm asking for, a motion for moving for
14 non-suit as regards the water supply permit and
15 the wastewater permit, at a minimum. I mean,
16 I've asked for non-suit as to the other one, as
17 well, but I'll just leave it at those two right
18 now.

19 **THE COURT:** And, as I said a while ago, I humbly deny
20 that.

21 **MR. CHURDAR:** Okay.

22 **THE COURT:** Thank you. All right. 9:00 Monday
23 morning.

24 **MR. WALKER:** Yes, sir.

25 **THE COURT:** Oh, my Clerk of Court wanted to come talk



1 truth, the whole truth, and nothing but the
2 truth, so help you God?

3 **DR. KANA:** I do.

4 **COURT REPORTER:** Thank you.

5 **DR. KANA - DIRECT EXAMINATION BY MR. WALKER:**

6 Q: Dr. Kana, good morning.

7 A: Good morning.

8 Q: Where do you live?

9 A: Columbia, South Carolina.

10 Q: And where are you employed?

11 A: Coastal Science and Engineering.

12 Q: Are you still teaching?

13 A: No.

14 Q: Did you previously teach?

15 A: Yes.

16 Q: Where did you teach?

17 A: University of South Carolina.

18 Q: What did you teach there?

19 A: Courses in coastal processes, beach erosion,
20 coastal dynamics.

21 Q: Would you give The Court your educational
22 background?

23 A: I attended Johns Hopkins University, graduated
24 from there, and then I came down to South
25 Carolina and got a master's and Ph.D. from the



1 University of South Carolina, Department of
2 Geological Sciences.

3 Q: And what was your undergraduate degree in?

4 A: Natural science.

5 Q: And are you a coastal geologist?

6 A: Yes.

7 Q: Do you hold any licenses associated with that
8 work?

9 A: Yes, I'm a registered professional geologist.

10 Q: Are you a member of any professional
11 associations involved with your work?

12 A: Yes.

13 Q: What are those?

14 A: American Shore and Beach Preservation
15 Association, which is an organization, a non-
16 profit, that promotes and sponsors research on
17 coastal issues, particularly beach restoration.
18 I'm on the Board of Directors for that
19 organization. Also, I'm an affiliate member of
20 American Society of Civil Engineers and I've had
21 many memberships in other scientific
22 organizations over the years.

23 Q: You mentioned that you are employed by CSE.
24 Tell us a little bit about the work that CSE
25 does.



1 A: Coastal Science and Engineering was founded in
2 1984 by myself and another partner and since
3 that time, we've developed a specialization in
4 beach erosion studies and beach restoration
5 designs.

6 Q: We're obviously here today about Kiawah Island
7 and Captain Sam's Spit, in particular. Have you
8 over the years studied the geomorphology and
9 coastal processes affecting Kiawah Island and
10 Captain Sam's Spit?

11 A: Yes, I have.

12 Q: Have you also been involved in studying those
13 processes as they affect Kiawah's neighbor,
14 Seabrook Island?

15 A: Yes, I have.

16 Q: Have you done work, in fact, for Seabrook Island
17 Property Owners' Association?

18 A: Yes, I have.

19 Q: Have you done work for the Town of Kiawah
20 Island?

21 A: Yes.

22 Q: When did you -- before I get to that, what type
23 of work have you done for Seabrook Island
24 Property Owners' Association?

25 A: My first work for Seabrook Island was in the



1 late '70s. Since that time, we have monitored
2 Seabrook Island's shoreline yearly and we have
3 also designed and implemented or managed the
4 construction of three inlet relocations and also
5 one dredging project to restore a portion of the
6 island back in 1990.

7 Q: Going to Kiawah Island, when did you first start
8 studying the processes affecting Kiawah Island?

9 A: Probably around 1982, '81, something like that.

10 Q: What projects have you done on Kiawah Island?

11 A: We've done two projects at the east end
12 involving realignment of small channels. One
13 was in 2006, I believe, and the other one was in
14 2015. And in addition, we've been monitoring
15 that beach annually for -- since the '80s.

16 Q: All right. If you look in that notebook in
17 front of you to your immediate left, there are
18 some tabs and if you would turn to tab 22,
19 please. KDP 22. What is that?

20 **(Respondent's Exhibit Number 22 was introduced into**
21 **the record at this time.)**

22 A: That's a brief resume of some of my experience.

23 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 22:**

24 **MR. WALKER:** Your Honor, at this time, we would move
25 into evidence Respondent's Exhibit 22.



1 MS. ARMSTRONG: No objection.

2 THE COURT: Mr. Churdar?

3 MR. CHURDAR: No objection, Your Honor.

4 RULING OF THE COURT:

5 THE COURT: It's admitted.

6 (Respondent's Exhibit Number 22 was admitted into
7 evidence).

8 Q: Does your resume contain a bibliography?

9 A: Yes, somewhere. Not with this particular
10 version, but we have a long version ---

11 Q: This is the one I peeled off the website.

12 A: Sure.

13 MR. WALKER: Could we mark this as KDP 43?

14 (Respondent's Exhibit Number 43 was marked for
15 identification purposes).

16 Q: I'm handing you what's marked as KDP 43. Would
17 you tell us what that is?

18 (Respondent's Exhibit Number 43 was introduced into
19 the record at this time.)

20 A: This is a reference list for reports that I and
21 my colleagues have prepared over the years. It
22 looks like it came out of one of our annual
23 monitoring reports for Seabrook Island as it
24 shows on the bottom there.

25 Q: Does it include a list of publications that CSE



1 and you have authored over the years dealing
2 with Seabrook Island and Kiawah Island?

3 A: Yes, I believe so.

4 Q: All right.

5 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 43:**

6 **MR. WALKER:** At this time we'd move 43 into evidence.

7 **MS. ARMSTRONG:** No objection.

8 **MR. CHURDAR:** No objection.

9 **RULING OF THE COURT:**

10 **THE COURT:** It's admitted.

11 **(Respondent's Exhibit Number 43 was admitted into**
12 **evidence).**

13 Q: Has Coastal Science Engineering done projects
14 for DHEC OCRM?

15 A: Yes, we have.

16 Q: What are some of the projects you've done?

17 A: At the moment, we're doing an annual monitoring
18 of all the beaches in South Carolina that are
19 developed. This is a standard set of surveys
20 that are taken at about 400 or 500 locations.
21 We do profiles offshore. We've been doing that
22 under contract for the last couple of years.
23 Going back to the '80s, CSE was very involved
24 with DHEC in the development of the rules under
25 the Beach Management Act. We set -- helped DHEC



1 set up the shoreline monitoring program back
2 then and we used to train students from Coastal
3 Carolina, College of Charleston, USC-Beaufort
4 and other places, in data collection and we've
5 also done I can't remember how many shoreline
6 management plans for communities that went to
7 DHEC or for DHEC itself, which formerly was
8 South Carolina Coastal Council back in the '80s.

9 Q: Were you involved in providing information for
10 the setting of the base lines and setback lines
11 back in 1988 or '89 ---

12 A: Yes, we were.

13 Q: --- when the Beachfront Management Act was
14 founded?

15 A: Yes, we were.

16 Q: Have you done projects -- did you mention you do
17 projects for local governments?

18 A: Yes, we do.

19 Q: What types of projects?

20 A: We helped the Town of Seabrook with their
21 Beachfront Management Plan. That was fairly
22 recent, 2014, I believe, 2013, somewhere around
23 there. We've assisted a number of other
24 municipalities over the years, North Myrtle
25 Beach, the City of Myrtle Beach, with their



1 Shorefront Management Plans.

2 Q: Well, you've been talking mainly about Seabrook
3 and Kiawah in South Carolina. Do you and your
4 firm do work outside of South Carolina?

5 A: Yes, we do.

6 Q: Where do you also do work?

7 A: We've done extensive work in North Carolina
8 restoring quite a few beaches over the last 20
9 years. We've restored a couple of beaches in
10 New York, then we've got some international
11 experience, as well, with beach restoration.

12 Q: Have you testified in court before?

13 A: Yes, I have.

14 Q: Have you been qualified as an expert before?

15 A: Yes, I have.

16 **MOTION TO OFFER AS EXPERT:**

17 **MR. WALKER:** Your Honor, at this time, we'd offer Dr.
18 Kana as an expert in coastal geology, coastal
19 processes, and coastal policies.

20 **MS. ARMSTRONG:** May I voir dire?

21 **THE COURT:** Yes.

22 **DR. KANA - VOIR DIRE EXAMINATION BY MS. ARMSTRONG:**

23 Q: Dr. Kana, in Exhibit Number 43, KDP 43, in
24 reviewing the documents that are cited, the vast
25 majority of those looks like only the very, very



1 small -- less than probably five are peer-
2 reviewed, correct?

3 A: Perhaps. I haven't really added them up here.

4 Q: All of these reports that are listed related to
5 Seabrook Island, none of those are peer-
6 reviewed, correct?

7 A: No.

8 Q: Have you ever been asked to serve by the
9 Department of Health and Environmental Control
10 on any advisory panel or council or task force
11 related to the Beachfront Management Act?

12 A: Well, I was advising the Blue Ribbon Committee
13 back in 1986-87 when the initial Act was in
14 formulation, but I was not formally on the Blue
15 Ribbon Committee either time, nor was I on the
16 more recent Blue Ribbon Committee.

17 Q: And I understand from your testimony that most
18 of the work that you've done in setting baseline
19 and work related to coastal management is
20 related to data collection and monitoring and
21 execution of various projects, is that accurate?

22 A: That's the majority of our work, yes.

23 **MS. ARMSTRONG:** Your Honor, we don't object to the
24 first two areas. As far as policy, I haven't
25 heard anything that indicates to me that Dr.



1 Kana's got expertise in setting policy.

2 **THE COURT:** Mr. Walker?

3 **MR. WALKER:** I'd be happy to examine a bit more.

4 **THE COURT:** Okay.

5 **DR. KANA - EXAMINATION BY MR. WALKER:**

6 Q: Before I get to that, there was some mention
7 about your articles being peer-reviewed. Are
8 the methods that CSE and you use in those
9 reports the same methods that are generally
10 accepted for this type of work?

11 A: Yeah, I think in some cases they actually exceed
12 some of the accepted ---

13 Q: They'd be more exacting?

14 A: Yes.

15 Q: Have you worked with either state or local
16 governments in establishing policies and by that
17 good beach management?

18 A: We've encouraged DHEC over the years, or OCRM,
19 to implement good setbacks for development,
20 avoid developing in high hazard areas, and
21 things like that.

22 Q: Have you done that with ---

23 A: We've also encouraged them particularly to go to
24 setbacks that are related to the site specific
25 erosion rates. We've developed methodology for



1 that. So that's a big thing that we've pushed
2 over the years.

3 Q: Have incorporated beach communities come to you
4 for advice and recommendations?

5 A: Yes, they have.

6 Q: What would be some examples of those?

7 A: North Myrtle Beach, Myrtle Beach, Pawley's
8 Island, Debordieu, Isle of Palms, Sullivan's
9 Island, Folly Beach, Kiawah, Seabrook.

10 Q: Is it your understanding that they were seeking
11 your advice and recommendations in order to
12 develop sound policies?

13 A: The motivations were often times to improve the
14 condition of their beach, whether proactively or
15 reactively. And what I mean by that is
16 proactively, in the cases where erosion had
17 threatened properties and so we restore beaches
18 in most cases. Reactively is where you help a
19 community establish a setback line or a -- a
20 buffer between the ocean and the beach.

21 Q: Are you personally and professionally familiar
22 with the beachfront management policies in South
23 Carolina?

24 A: More or less, but I -- I'm sure I don't have
25 every single little nuance as the laws are



1 modified from year to year a little bit.

2 Q: And I'm not asking so much about citing chapter
3 and verse as the policies themselves.

4 A: Yes, generally speaking.

5 **MR. WALKER:** Your Honor, we think he has shown that
6 he is qualified in coastal policies. He's
7 advised state agencies; he's advised local
8 governments; he's familiar with the policies.

9 **MS. ARMSTRONG:** Your Honor, this witness said he's
10 more or less familiar with the acting policies.
11 He's got a general familiarity with the
12 policies. He -- as far as management plans, he
13 said that his work related to the management
14 plan, the motivations are to improve the
15 condition of the beach. I haven't heard
16 anything that indicates he's got any expertise
17 or brings anything to the table as far as the
18 implementation of the policies of the Beachfront
19 Management Act.

20 **THE COURT:** Well, he advised the Blue Ribbon
21 Committee that adopted the original Beachfront
22 Management Act. Is that not familiarity with
23 policies?

24 **MS. ARMSTRONG:** I mean, he may have some familiarity.
25 He wasn't on -- it sounded like his role was in



1 an informal role because he wasn't on the
2 Committee. Either committee. He's testified to
3 that.

4 **THE COURT:** Mr. Churdar, any position concerning his
5 qualifications?

6 **MR. CHURDAR:** I don't have any objection, Your Honor.

7 **RULING OF THE COURT:**

8 **THE COURT:** Okay. I qualify him in all three areas,
9 I think I qualified yours in policy, too, didn't
10 I? Your expert?

11 **MS. ARMSTRONG:** He certainly had experience and
12 expertise in it.

13 **THE COURT:** Yeah, I just want to make sure I've -- I
14 mean, I think your concerns go to the weight of
15 his qualifications and not the qualifications.

16 **MS. ARMSTRONG:** I -- no, my concerns absolutely go to
17 the ---

18 **THE COURT:** No, I said my ruling is ---

19 **MS. ARMSTRONG:** Yeah.

20 **THE COURT:** --- that your concerns go to the weight
21 of his qualifications rather than whether he's
22 qualified, so I so qualify.

23 **DR. KANA - CONTINUED DIRECT EXAMINATION BY MR. WALKER:**

24 **Q:** Dr. Kana, are you familiar with the more recent
25 geological history of Kiawah Island?



1 A: Yes, I am.

2 Q: And have you gone back to do work to study the
3 coastal processes as they act on Kiawah Island
4 and the configuration or geomorphology of the
5 island over the last few hundred years, or how
6 far back can you go?

7 A: Yes, I -- I've done quite a few studies going
8 back to the '80s. We evaluate shoreline changes
9 sometimes going back to 1800s, but we don't put
10 a lot of faith in the those earlier data, so I
11 would say the majority of the information about
12 Kiawah that we're familiar with intimately, if
13 you will, would be from around the 1940s or '30s
14 to the present.

15 Q: All right.

16 **MS. ARMSTRONG:** Your Honor, I'm sorry to interrupt
17 your flow, Trenholm. I don't know that -- I had
18 an objection to Dr. Kana being qualified in
19 coastal policy and what I heard The Court say is
20 that you're recharacterizing my objection that
21 the objection is to the weight, which it's
22 certainly ---

23 **THE COURT:** No, I didn't -- that's not correct.

24 **MS. ARMSTRONG:** Okay.

25 **THE COURT:** I said that my ruling was that your



1 concerns go to the weight that I would give his
2 testimony as opposed to whether that he's
3 qualified. In other words, I'm qualifying him
4 as an expert, but I'm setting forth that I will
5 consider your concerns in regard to the weight
6 I give his testimony.

7 **MS. ARMSTRONG:** What I heard The Court doing was
8 characterizing my concerns and so I considered
9 ---

10 **THE COURT:** No, I do that.

11 **MS. ARMSTRONG:** Okay.

12 **THE COURT:** If I did do that, I would correct the
13 record.

14 **MS. ARMSTRONG:** Okay.

15 **THE COURT:** I didn't mean to do that in the least.

16 **MS. ARMSTRONG:** Okay. Thank you, Your Honor. I'm
17 sorry, Trenholm.

18 **MR. WALKER:** That's okay.

19 **Q:** Based on the study that you've done of Kiawah
20 Island, is there any pattern that's emerged as
21 far as accretion or erosion over the last 100
22 years?

23 **A:** I would say the biggest pattern that's really
24 significant at Kiawah is the magnitude of shoal
25 bypassing events at the east end because that



1 really controls the evolution of the entire
2 island and the stability of the beach going
3 forward. Shoal bypassing, if the Court's not
4 familiar with that, is the periodic release of
5 sand bars from an ebb tidal delta, those are the
6 seaward shoals that are inlets. And large bars
7 will form at the mouth of the inlets and these
8 bars will come ashore periodically and accrete
9 to the shoreline. And the thing that's really
10 interesting about Kiawah's situation is that
11 we've monitored probably the largest episodic
12 shoal bypassing events that's ever been
13 documented on the east coast. That's ---

14 Q: Does that work to the benefit of the beach at
15 Kiawah?

16 A: Yes.

17 Q: How so?

18 A: It adds sand to the system.

19 Q: So long term, say, the last 50 or 100 years,
20 long term has Kiawah Island been accretional?

21 A: Accretional, yes.

22 Q: Has it actually moved seaward?

23 A: Absolutely.

24 Q: Why?

25 A: Because it's gaining huge volumes of sand at the



1 east end from Stono Inlet. That sand is coming
2 ashore, wrapping itself around the east end of
3 Kiawah and then working its way down to the west
4 and then ultimately down to Captain Sam's inlet.
5 Between 1990 and 2005, we monitored two major
6 shoal bypass events that came ashore and
7 contributed over five million cubic yards to
8 Kiawah Island. And to put that in perspective,
9 five million cubic yards is about as much sand
10 as Myrtle Beach and North Myrtle Beach had
11 pumped in between 1997 and 2010. So it's a huge
12 influx of sand.

13 Q: Is that type of sand accumulation unusual on the
14 east coast?

15 A: Absolutely, for that scale.

16 Q: Would you describe it as exceptional?

17 A: Exceptional. And we've written about that in
18 refereed papers.

19 Q: What I'd like to do now is turn to some images
20 to illustrate your testimony and, if we could,
21 Dave, if you could put up the view from 2009.
22 The first image we're going to see is from 2009.
23 Do you recognize that aerial image?

24 A: It may be one that we took or somebody else, but
25 I know where you're looking at.



1 Q: All right. What are we looking at?

2 A: We're viewing ---

3 **MS. ARMSTRONG:** Objection, Your Honor. Dr. -- Mr.
4 Walker's characterized this image as one from
5 2009 and I don't -- I mean, he's testifying
6 basically that it's a 2009 image. Dr. Kana
7 needs to be the one ---

8 **THE COURT:** I sustain the objection.

9 Q: Is this -- what is this an image of?

10 A: It's the west end of Kiawah Island, looking
11 toward Kiawah River and Captain Sam's Inlet in
12 the upper left corner. I don't know the date of
13 the image.

14 Q: All right. Does it show any indication or any
15 indicators, geoindicators, of accretion?

16 **MS. ARMSTRONG:** Objection, Your Honor, as leading the
17 witness.

18 Q: What does it show that -- does it show anything
19 that's significant from a geomorphological
20 standpoint?

21 A: Well, when we look at images like this for the
22 South Carolina coast, we look at where the tree
23 line is. The tree line usually indicates land
24 that's been in place for 25, 30 years or more.
25 And then we look at the shape of the dune lines.



1 The dune lines often form ridges and each of
2 those linear ridges that's parallel to the tree
3 line there would represent a position of the
4 shoreline at some former time. So if you see a
5 series of these ridges, that's an indication
6 that land has been accreting for some period of
7 time. And, of course, we know that from the
8 measurements we've made, so I'm not saying
9 anything unusual in this case.

10 Q: I meant to ask you about that because earlier in
11 your testimony you mentioned a beach profile.
12 What is -- what's a beach profile?

13 A: A profile is just a topographic survey extending
14 from some back shore area to save the tree line
15 out into the water, going across each dune
16 ridge, the beach -- the dry beach area, the wet
17 beach area, on out into the underwater zone.

18 Q: Why would you be looking at beach profiles over
19 time?

20 A: Because we use those to measure the quantity of
21 sand in the system, so if you removed all these
22 dun ridges that you see seaward of the tree
23 line, for example, that would take the volume
24 away and the beach would be up against the tree
25 line. And that would indicate erosion. So th



1 profile would be a shape like this with a tree
2 line right there at the back edge where the dune
3 would be. But then ---

4 Q: In your -- go ahead. I'm sorry.

5 A: --- you do more profiles over time, you see the
6 secession of beach ridges or dune lines that are
7 forming and so you can tell whether the beach is
8 accreting or eroding and you can quantify that.

9 Q: Have you personally looked at the beach profiles
10 that have been accumulated on the west end of
11 Kiawah, including Captain Sam's Spit over the
12 years?

13 A: Yes.

14 Q: What do they demonstrate?

15 A: They show long term trends of accretion with
16 noise in the signal. In other words, if there's
17 an average trend of accretion, it's going up and
18 down. Short periods of erosion, followed by
19 periods of accretion, followed by erosion,
20 accretion, and so on with a long term trend of
21 build-up of those areas.

22 Q: In the 35 or so years that you've been studying
23 the island, have you noticed any change in the
24 dunes on the west end, including Captain Sam's
25 Spit, the dune ridges?



1 A: Well, we've seen successive dune lines form as
2 accretion has occurred and during those
3 accreting periods, sometimes you'll have a
4 massive influx of sand, more than usual. And
5 then the beach will equilibrate around that new
6 volume. Sand will be trapped by the debris, the
7 triticeae that is washed up, that will initiate
8 the formation of the dune; the dune will grow;
9 and then that dune becomes stabilized with some
10 vegetation. And then if you have a storm that
11 comes along, just like Matthew did last year,
12 you may cut that dune back and so that's what
13 controls these cycles. The storm events will
14 cut the dunes back and then between storms, the
15 dunes will accrete again, as long as there's
16 sand coming in from the east, which is the case
17 at Kiawah.

18 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 44:**

19 **MR. WALKER:** Respondents offer 44 into evidence.

20 **MS. ARMSTRONG:** No objection.

21 **THE COURT:** Is it marked? Mr. Churdar?

22 **MR. CHURDAR:** No objection.

23 **RULING OF THE COURT:**

24 **THE COURT:** It's admitted.

25 **(Respondent's Exhibit Number 44 was marked for**



1 identification purposes and admitted into evidence).

2 Q: Now, I'm going to race you down the beach to the
3 tip of Captain Sam's. Can you identify that?

4 A: Yes, that's Captain Sam's Inlet, the west end of
5 Kiawah spit.

6 Q: I'd like to talk about the inlet itself. Have
7 you studied the location of the inlet over the
8 years?

9 A: Yes.

10 Q: Historically, has there been a pattern?

11 A: Yes.

12 Q: What has that been?

13 A: The excess sand that works its way down Kiawah
14 builds a spit, and you see this formation here,
15 you see that big sand bar that's trailing out
16 from that end of the spit ---

17 Q: And since you've last been here, we actually
18 have a smart screen and if you want to indicate
19 anything, you can touch the screen and show what
20 you're talking about.

21 **THE COURT:** Oh, that's on highlighting. Do you want
22 it left on highlighting or do you want it more
23 narrow than that?

24 A: It looks ---

25 **THE COURT:** If it's fine with you, we'll leave it.



1 A: It's fine with me.

2 **THE COURT:** Okay.

3 Q: All right. Keep going, Dr. Kana.

4 A: That big sand bar that I just ran my finger
5 across there has cut across the new channel,
6 which was actually constructed here that I've
7 just drawn. When we relocated Captain Sam's
8 Inlet in 2015, we cut a channel right across the
9 end of the spit all the way out to the ocean.

10 Q: All right. And we're going to get to the inlet
11 relocations in a couple of minutes. In terms of
12 the development of the end of the spit, is it
13 moving in a certain direction?

14 A: Yes, it's moving from right to left.

15 Q: Historically has it grown?

16 A: Yes.

17 Q: And have you tracked the pace with which it's
18 moving towards Seabrook?

19 A: Yes.

20 Q: And what has that averaged roughly?

21 A: In rough figures about 200 feet per year.

22 Q: Is there anything on this photograph that shows
23 emerging dunes?

24 A: Well, sure, the dunes that are less vegetated
25 are emerging. The fact that we have this spit



1 extending off to the end, the bare sand area,
2 indicates accretion and that's generally a
3 forerunner of a new dune line that's going to
4 form.

5 Q: Let's now talk about the migration of the ---

6 **THE COURT:** What were you talking about when you just
7 said that, spinning off the end.

8 A: Well, you see the curvature of these ---

9 **THE COURT:** Well, point to it.

10 Q: You can touch the screen.

11 A: Each of these dune lines curves around the end
12 of the spit. These represent where the beach
13 was at former times. This is what we call a
14 recurved spit. It's a very characteristic
15 signature from where the former shoreline was.
16 So as sand has accumulated out on the spit,
17 it's building these recurved spit -- the sand is
18 going into the inlet but usually it's coming in
19 at a pulse of sand, a sudden sand. So you see
20 this more recent one here shot a bunch of sand
21 way out here and what that's going to do is
22 leave the area around here sort of a sheltered
23 zone and a new beach line will form further to
24 the west. That spit growth is what forces
25 Captain Sam's Inlet to migrate from east to



1 west.

2 Q: And most of us are used to looking at the map in
3 east to west, but ---

4 A: North to south.

5 Q: North to south.

6 A: Right.

7 Q: What affect, if any, does that migration have on
8 the sand supply of Seabrook?

9 A: Well because ---

10 Q: Or influence -- does it have any influence on
11 Seabrook Island?

12 A: Sure, it cuts into Seabrook, so as the inlet
13 migrates to the west, it's truncating Kiawah --
14 Seabrook's beach. And so that's why
15 periodically, Seabrook tries to move the inlet
16 back to this location. That was an agreed upon
17 location back in the 1980s when we first
18 conceded to this plan.

19 **THE COURT:** Well, what beach are we talking about on
20 Seabrook?

21 A: Pardon me?

22 **THE COURT:** I keep hearing about that. What beach
23 are we talking about on Seabrook?

24 A: The north end ---

25 **THE COURT:** It's not on this part of ---



1 A: It's not on the map.

2 **MR. WALKER:** Can we go to the previous picture and
3 see if it's there?

4 Q: Can we go back to 44? Is it at all evident
5 there?

6 A: You can just barely see it at the top left
7 there. Seabrook is way up here (indicating).

8 Q: Okay. You were talking about the drift of the
9 sand on the east coast. Is there a consistent
10 direction of the offshore transport of sand?

11 A: Generally from north to south.

12 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 45:**

13 **MR. WALKER:** We introduce Respondent's 45, which is
14 the picture that's on the screen now.

15 **THE COURT:** Are you offering it?

16 **MR. WALKER:** Offering it into evidence.

17 **THE COURT:** Ms. ---

18 **MS. ARMSTRONG:** No objection.

19 **MR. CHURDAR:** No objection.

20 **RULING OF THE COURT:**

21 **THE COURT:** It's admitted.

22 **(Respondent's Exhibit Number 45 was admitted into**
23 **evidence).**

24 Q: You're familiar with the erosion in the Kiawah
25 riverbend, are you not, near Captain Sam's



1 Inlet?

2 A: I am.

3 Q: Have you monitored that, as well, to some
4 extent?

5 A: Yes, we have.

6 Q: What is, and we can go back to 44, the first
7 aerial. Can you show us where that bend is with
8 your finger?

9 A: (Witness does as requested).

10 Q: And what is causing that erosion?

11 A: The river, Kiawah River as it approaches the
12 shoreline, the ocean coast, used to discharge
13 right at that bend. In 1949, there was an inlet
14 there. Since '49, the spit has accreted and so
15 with the spit accretion, that has diverted
16 Kiawah River, made it turn to the right, go down
17 the spit until it can empty out. What's forcing
18 the encroachment on the area that I just
19 highlighted is the marsh directly across the
20 way, I'm just putting a little ---

21 Q: Did you -- let's do that.

22 A: Right there (indicating).

23 Q: How does that cause the erosion?

24 A: Well, that marsh has been growing and over the
25 last 30 years or so we've seen marsh accretion



1 actually forcing the channel closer to the bend
2 in the river there, right along Beachwalker Park
3 and then down into the curve of the spit.

4 Q: To a reasonable degree of geomorphological
5 certainty, is the sand that may be eroding in
6 the riverbend at all contributing to the
7 accretion of the front beach of Kiawah?

8 A: No.

9 Q: Why not?

10 A: Well, the sand -- the sand on the front beach at
11 Kiawah is derived from Stono Inlet and it works
12 its way down along the oceanfront. Under these
13 waves, you can -- this photograph here, you can
14 see the waves coming in at an angle, so they're
15 actually driving sand in this direction. That's
16 the source of sand to the oceanfront. Sand
17 that's eroded from the bend on the back side of
18 Kiawah spit, will work its way down the river to
19 Captain Sam's Inlet and then some of it will be
20 flushed offshore and form the ebb tidal delta of
21 Captain Sam's Inlet. That ebb tidal delta, of
22 course, is south of the oceanfront of Kiawah
23 Island, so we spend a lot of time trying to
24 figure out where the sand is coming from and
25 going to on the coast.



1 Q: Now, I'd like to turn your attention to your
2 inlet relocations. Were you instrumental in the
3 first inlet relocation?

4 **MS. ARMSTRONG:** Objection, Your Honor, relevance.

5 **MR. WALKER:** Your Honor, we're going to show that
6 it's extremely relevant because the petitioner's
7 case is that the inlet is highly unstable and
8 we're going to show that these inlet locations
9 have broken what's been described as a cycle of
10 elongation and breach and have changed the
11 geomorphology of Captain Sam's Spit.

12 **THE COURT:** Well, subject to you linking that up, I
13 overrule the objection.

14 **MS. ARMSTRONG:** Your Honor -- oh, okay.

15 **THE COURT:** You made your objection?

16 **MS. ARMSTRONG:** Yeah, I thought you were going to
17 hear from me, that's all.

18 **THE COURT:** Oh, no, I'll hear from you. I thought I
19 heard from you when you made your objection.

20 **MS. ARMSTRONG:** Okay. Okay. Well ---

21 **THE COURT:** But go ahead.

22 **MS. ARMSTRONG:** All right. Well, Dr. Kana did this
23 work on behalf of the Town of Seabrook Island.
24 I think Mr. Walker may be mischaracterizing our
25 -- the petitioner's case. What Dr. Kana has



1 said is that the Kiawah beach is stable. He
2 said that the shoal bypassing events are -- is
3 what controls what's happening on Kiawah. That
4 was his testimony just here today. Back in
5 2009, he gave nearly the same testimony that
6 what's happening on Kiawah Island and what's
7 happening on Captain Sam Spit is that there's
8 a very large amount of sand traveling down the
9 Stono Inlet and that's what's affecting the
10 processes that occur on Captain Sam's Spit. So
11 to the extent that Dr. Kana's been involved on
12 behalf of the Town of Kiawah in manipulation on
13 the end of Captain Sam's Spit, we don't see the
14 relevance to the permit at issue.

15 **MR. WALKER:** We spent a fair amount of time talking
16 about this cycle of elongation and breach.
17 There was cross-examination or direct
18 examination about it. We will also show that
19 this relocation has a direct influence on the
20 accretion of the beach in front of the area that
21 is allowed to be developed under the development
22 agreement and under the Beachfront Management
23 Act, so, I mean ---

24 **THE COURT:** I overrule the objection subject to what
25 I stated earlier.



1 Q: Were you involved in that first location?

2 A: Yes, I was.

3 Q: What was your role?

4 A: I was managing the construction; I was involved
5 in the planning; I prepared a number of the
6 reports leading up to it; I was involved in the
7 permit application, and testified at the appeal
8 of the permit in 1981 or '82; and it was -- that
9 work was done while I was a partner with
10 Research Planning Institute.

11 Q: Simply speaking, what did you do in order to
12 relocate the inlet?

13 A: We used ---

14 Q: And we'll see some pictures in a minute of the
15 last one.

16 A: We used land-based equipment, meaning trucks,
17 bulldozers, and we excavated a basin across the
18 spit in the dry. We kept it de-watered. It was
19 not connected to the river or the ocean until
20 such time as it was time to open up the channel.
21 We did that by scraping down the last remaining
22 little dyke or dune ridge on the ocean side on
23 a falling tide and then we let the tide come in,
24 fill the basin, and then we beached it at high
25 tide on the river side and let the tides come



1 through and basically do the work of the final
2 cut. And then we took the spoil or the sand
3 from the excavations, stockpiled them at the end
4 of the spit, and on the Seabrook side, and on a
5 designated time pushed the piles of sand into
6 the channel on the falling tide and then had to
7 work pretty hard to beat the tide to get the
8 inlet closed.

9 Q: When was the last time or third time that they
10 channeled those ---

11 A: 2015.

12 Q: All right. We have some illustrations of that.
13 If we could have KDP Exhibit 24, please.

14 **(Respondent's Exhibit Number 24 was introduced into**
15 **the record at this time.)**

16 Q: Okay. Do you recognize this image?

17 A: Yes, I do.

18 Q: What does this image show?

19 A: This shows the end of Kiawah spit shortly after
20 the inlet was relocated. This image was taken
21 in July 2015 and I believe the project was
22 completed around June 18th, 2015. So this was
23 just about a month after -- afterwards. What
24 you see here is the old channel that was closed
25 and the new channel that was opened here. And



1 within the space of just a few weeks, we have a
2 formation of a new ebb tidal delta here. That's
3 an indication of the sand that's being caught in
4 the new inlet and flushed offshore. Much of
5 that sand comes right off this section of beach,
6 falls into the channel, and then it's sent out,
7 offshore. This light sand area here is the
8 closure dyke that we had to build across the low
9 parts of the spit. We stockpiled sand here and
10 on the Seabrook side and then on an appointed
11 day, we closed that last remaining spit right
12 there (indicating).

13 Q: Does the channel stay in the same location after
14 you let the tide rush through into the new
15 channel?

16 A: Unfortunately not.

17 Q: What happens?

18 A: It immediately starts migrating back towards
19 Seabrook.

20 Q: Is there any ---

21 **THE COURT:** What sand migrates back towards Seabrook?

22 A: The channel starts to migrate.

23 **THE COURT:** It just -- this delta -- that delta
24 (indicating)?

25 A: Yes.



1 **THE COURT:** Is that the one?

2 **A:** That -- the whole system tends to migrate to the
3 west over time because sand -- remember, sand is
4 coming in from the east where that -- where I've
5 just drawn that arrow, and so that is forcing
6 the channel to rotate and the whole channel to
7 move to the west.

8 **Q:** Would there be any scarping of the east or north
9 shore as the channel settles in?

10 **A:** Yes, any time you have an inlet, if you start
11 with a sharp shoreline like this, which was
12 essentially what we had when we made the cut,
13 that was the original shore line. If you can
14 pick that out. You're always going to round off
15 that sharp edge. Waves are going to come in.
16 Waves are not going to just allow a sharp edge
17 of sand to be maintained there. That's just not
18 the way nature works. So we always expect a
19 recurved spit wherever we have an inlet, so we
20 expect rapid recession right in that location
21 and then the entire system now will work its way
22 to the west.

23 **Q:** We're going to look at some later images, is
24 that, in fact, what happened here?

25 **A:** Yes.



1 Q: And do you ---

2 A: It happened after the '83 project and 1996
3 project.

4 Q: And what type of vegetation are we talking
5 about, the dark green vegetation that's up there
6 right next to the channel?

7 A: Like right there (indicating)?

8 Q: Yeah.

9 A: That's, for the most part, shrubs, wax myrtle,
10 large wax myrtle that might be 20 feet high.

11 Q: Does the movement of the channel as you describe
12 have any effect on those plants?

13 A: Only if they're immediately adjacent to the
14 active beach zone.

15 Q: All right. Now let's go to ---

16 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 24:**

17 **MR. WALKER:** Before we go, we offer KDP Exhibit 24
18 into evidence.

19 **MS. ARMSTRONG:** Objection on the grounds of
20 relevance.

21 **THE COURT:** Okay.

22 **MR. CHURDAR:** No objection from the Department.

23 **MR. WALKER:** Go to 25, please.

24 **RULING OF THE COURT:**

25 **THE COURT:** Wait one second. It's admitted.



1 (Respondent's Exhibit Number 24 was admitted into
2 evidence).

3 THE COURT: Next.

4 (Respondent's Exhibit Number 25 was introduced into
5 the record at this time.)

6 Q: Dr. Kana, do you recognize this image?

7 A: Yes.

8 Q: What are we looking at here?

9 A: This is the east end of Seabrook Island and you
10 can see the location of the former channel.
11 This is the Kiawah River before the relocation
12 in 2015. There's actually a -- some scar of the
13 channel edge from 1996 and then this edge right
14 here is where the 1982 channel was before the
15 first recut.

16 Q: All right. What are -- do you have lines on --
17 did CSE prepare this?

18 A: Yes, that's from one of our monitoring reports.

19 Q: What did those lines represent?

20 A: These are survey lines that we profile. They're
21 approximately located. This is an oblique
22 image, but it's to illustrate roughly the
23 azimuth of the profile transect that we're
24 taking.

25 Q: What was that word that you used?



1 A: Profiled or transect across the land?

2 Q: The one with the Z? Azimuth?

3 A: Azimuth.

4 Q: What is that?

5 A: That's the orientation, easterly azimuth, that
6 goes from west to east. 90 degrees.

7 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 25:**

8 **MR. WALKER:** KDP offers 25 into evidence.

9 **MS. ARMSTRONG:** Objection, Your Honor, on grounds of
10 relevance. This is showing mostly Seabrook
11 Island and is related to just what happened with
12 respect to the inlet relocation project that's
13 designed as Dr. Kana testified that addressed
14 erosion, and bring sand down onto Seabrook
15 Island.

16 **THE COURT:** Mr. Walker?

17 **MR. WALKER:** This also explains why there has been
18 some scarping and the death of wax myrtles where
19 also in the next image or two, you're going to
20 see the ebb tidal delta.

21 **RULING OF THE COURT:**

22 **THE COURT:** Well, it may explain why at some point.
23 He hasn't explained why this exhibit reflects
24 that yet, has he? He's shown what happened, but
25 given the what you just said explained why.



1 MR. WALKER: All right.

2 Q: Does this -- you were talking about these beach
3 profiles. Were you required to monitor the
4 effects of the relocation project?

5 A: Yes.

6 Q: Are those lines associated with the monitoring
7 you did?

8 A: Yes.

9 Q: All right. So let's move on to KDP2 26, please.
10 **(Respondent's Exhibit Number 26 was introduced into**
11 **the record at this time.)**

12 Q: Are you familiar with this image?

13 A: Yes.

14 Q: And what does it show?

15 A: It's a view looking out new Captain Sam's Inlet
16 toward the ocean.

17 Q: Does it show anything with respect to the angle
18 of the channel?

19 A: Yes, it's oblique to the strand line. In other
20 words, if you draw a straight line along Kiawah
21 Beach, Kiawah spit, if the channel were
22 perpendicular to that spit, it would be shooting
23 out at a 90 degree angle. But in this case,
24 it's deflected to the west, which means it's an
25 oblique angle to the shoreline.



1 Q: Dr. Kana, do you have a rough estimate of the
2 acreage that was sheered off of Captain Sam's
3 Spit in the 2015 relocation?

4 A: Well, it's -- not off the top of my head.

5 Q: All right. Let's go to KDP, the next exhibit,
6 which I think is 27.

7 **(Respondent's Exhibit Number 27 was introduced into**
8 **the record at this time.)**

9 Q: Is this another angle of what we were just
10 looking at?

11 A: Yes.

12 **(Respondent's Exhibit Number 28 was introduced into**
13 **the record at this time.)**

14 Q: And if we would go to 28, please. All right.
15 Now, what does KDP Exhibit 28 show?

16 A: Well, this shows the entire delta complex of
17 Captain Sam's Inlet before the shoals of the old
18 delta have collapsed and moved ashore and as the
19 new shoals are in the formative stages. So
20 maybe first I'll try to highlight the previous
21 delta shoals, more or less like that
22 (indicating). That was the ebb tidal delta of
23 the inlet before it was relocated. And it's
24 those shoals that will eventually move ashore.
25 You can actually see them right here. The shape



1 of these shoals indicate to us that they're
2 actively moving shoreward. And over time,
3 they'll accrete to Seabrook and then work their
4 way down. So that's much like what happens at
5 the east end. The shoals come ashore and work
6 their way down. Meanwhile, at the mouth of the
7 new inlet, you have a new ebb tidal delta
8 forming out here. Those shoals are formed by
9 sand that comes down here, down Kiawah, works
10 its way into the inlet, falls into the channel
11 and then is flushed out in this direction to
12 build up that new ebb tidal delta. So this is
13 the whole cycle of sand transported around these
14 inlets. And what we're trying to do with these
15 inlet relocations is manipulate the channel
16 position so that we can free the sand here to
17 move onto Seabrook and then build a new delta
18 here to repeat the process along. And as we
19 build that new delta here, that acts to further
20 trap sand that's coming down Kiawah.

21 Q: That was going to be my next question. Does the
22 ebb tidal delta that we're looking at have an
23 influence on the sand supply of Captain Sam's
24 Spit?

25 A: Sure, yes.



1 Q: How?

2 A: It's acting like a groin to trap sand right in
3 this location (indicating).

4 Q: And what happens to the sand that it traps on
5 the east side, on the northeast side? Where
6 does that sand go with the effect ---

7 A: Well, sand is coming down this way and some of
8 that sand will accumulate right here in this
9 area. Some will move around the spit, fall into
10 the channel and then it'll come right back out
11 and form new delta.

12 Q: will any of that sand also go on the beach at
13 Captain Sam's above the ebb tidal delta?

14 A: Oh, yes, for sure.

15 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 28:**

16 **MR. WALKER:** Respondents offer Respondent's Exhibit
17 28 into evidence.

18 **MS. ARMSTRONG:** No objection.

19 **MR. CHURDAR:** No objection.

20 **RULING OF THE COURT:**

21 **THE COURT:** It's admitted.

22 **(Respondent's Exhibit Number 28 was admitted into**
23 **evidence).**

24 Q: Dr. Kana, some have described the geological
25 history of Captain Sam's Spit as the cycle of



1 elongation and breach. Are you familiar with
2 that?

3 A: Yes.

4 Q: To a reasonable degree of geomorphological
5 certainty, have these inlet relocations had an
6 effect on that?

7 A: It's kind of hard to -- hard to say exactly, but
8 what we've seen and I've had a chance to observe
9 this system for almost 40 years now, is perhaps
10 the most surprising thing is how much sand is
11 coming onto Kiawah Island at the east end and
12 working its way down through the system making
13 Kiawah healthier and healthier. And the way
14 that's affecting Captain Sam's Spit is it's --
15 what I've observed in the last 40 years is that
16 it's reduced the vulnerability of a breach.
17 That's not to say that you couldn't have a
18 breach under any circumstances because we could
19 have a thousand year event or something. Any
20 place on the coast is vulnerable, but what we've
21 seen is a surprisingly reduced degree of
22 vulnerability on the spit here as a result of he
23 accretion.

24 Q: What has been the effect of the channel
25 relocations on the natural migration of the



1 channel to the southwest?

2 A: They have -- each of the relocations has allowed
3 the natural processes to continue in a cycle.
4 It has shortened the spit; it's perhaps reduced
5 the vulnerability of a breach by moving the
6 channel up, but ---

7 Q: Does it actually physically move the channel to
8 the northeast?

9 A: The ---

10 Q: The inlet relocations?

11 A: Yes, we're moving the channel closer to the neck
12 of the spit.

13 Q: Dr. Kana, based on your knowledge of this area,
14 your 40 years of study, your data, to a
15 reasonable degree of geomorphological certainty,
16 will the sand most likely continue to accrete on
17 the west end of Kiawah Island, including Captain
18 Sam's, over time?

19 A: I would say for the next few decades it will
20 because the shoal bypass events at Stono Inlet
21 are very large in magnitude, so the sand that
22 comes in to the east end of Kiawah say this
23 year, will spend the next decade working its way
24 down to Captain Sam's Inlet. And we're still
25 seeing those shoal bypass events at the east



1 end. They haven't stopped. And Stono Inlet, in
2 my opinion, has more than enough sand in its ebb
3 tidal delta to continue feeding Kiawah Island
4 for several decades.

5 Q: Do you have any scientific estimates of the
6 volume of sand in the Stono Inlet that is
7 available to be flushed down the beach?

8 A: I think we've ridden in 100 million to 120
9 million cubic yards of sand, something on that
10 order.

11 Q: Now, I'd like to turn to the neck and the
12 riverbend that we were looking at earlier.
13 Given the sand accumulation, the dune ridges,
14 the history of the neck in the last 40 years,
15 and its proximity to the inlet, to a reasonable
16 degree of geomorphological certainty, do you
17 have an opinion as to whether it is likely that
18 the neck would breach?

19 A: Nobody can say with 100 percent certainty that
20 the neck wouldn't breach, but it's been getting
21 wider and wider ever since I've started to
22 monitor it from the '80s. And you can see from
23 this photograph here that the dunes have some
24 height on them. Clearly, the concern is you
25 have erosion on one side, but you have accretion



1 on the other side. So the question remains is
2 the neck getting wider over time or is it
3 staying the same or is it narrowing up. And ---

4 Q: Has CSE actually done comparative profiles?

5 A: Yes, we have.

6 MR. WALKER: Could we have Exhibit 29, please?

7 **(Respondent's Exhibit Number 29 was introduced into**
8 **the record at this time.)**

9 Q: Do you recognize this exhibit ---

10 A: Yes.

11 Q: --- KDP ---

12 A: This was out of a report that we did in 2009.

13 Q: Would you tell the Court what we're looking at,
14 please, Dr. Kana?

15 A: Well, these are shorelines going from, the black
16 represents 1979.

17 Q: So in 1979, where would the beach have been?

18 A: Well, on the river side it was here
19 (indicating).

20 Q: Right.

21 A: And on the ocean side, it was here (indicating).

22 Q: All right. Did you put lines on for the
23 different shoreline profiles or shorelines over
24 the years?

25 A: Yes, we did.



1 Q: Are those reflected in the box on the right, the
2 legend?

3 A: That's correct.

4 Q: What are the years that you used?

5 A: Well, 1979, '84, and '92, '99, '08, and '14.
6 2014.

7 Q: Did the methods that you used to compile this
8 exhibit, are those methods ones that are
9 generally accepted in your field?

10 A: I believe so, yes.

11 Q: And if we look at -- we look at 1979, let's look
12 at 2014. So where is 2014 on the river side?

13 A: That's the yellow line. I'm tracing here on the
14 river side (indicating).

15 Q: And where is the line on the beach?

16 A: Right there (indicating).

17 Q: So if we look at 1979 to 2014, what conclusion,
18 if any, can you draw about the beach and the
19 riverbend?

20 A: Well, depending on where you're measuring it,
21 you can see a seaward movement of the shorelines
22 on both sides.

23 Q: So tell us, if you look at the '79 ocean
24 shoreline and the 2014 ocean shoreline, what is
25 in between the two?



1 A: Between the two is the neck of the spit.

2 Q: All right. But I am asking -- going oceanward,
3 if we -- if you put your hand on where the
4 shoreline was in 1979, ocean's shoreline, and
5 you go to where it is now ---

6 A: It's accreted.

7 Q: Would all that land be accreted land?

8 A: Correct.

9 Q: Have you also done a profile across the beach
10 that includes the Kiawah River?

11 A: I believe so.

12 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 29:**

13 **MR. WALKER:** Before we get to it, Your Honor, we
14 would move Respondent KDP's Exhibit 29 into
15 evidence.

16 **MS. ARMSTRONG:** No objection.

17 **THE COURT:** That's the one I'm looking at right now?

18 **MR. WALKER:** Yes, sir.

19 **MR. CHURDAR:** No objection.

20 **RULING OF THE COURT:**

21 **THE COURT:** It's admitted.

22 **(Respondent's Exhibit Number 29 was admitted into**
23 **evidence).**

24 **MR. WALKER:** Okay. If we could have 30, please.

25 **(Respondent's Exhibit Number 30 was introduced into**



1 the record at this time.)

2 Q: Do you recognize 30?

3 A: Yes.

4 Q: What is -- if you would tell the Court what 30
5 is.

6 A: It's a cross-section that starts on the ocean
7 side and extends inland right across Kiawah
8 Spit; you see the dune ridges there that are
9 annotated, and then you ---

10 Q: Good to know.

11 A: --- come down into that deep trough, that's
12 Kiawah River cross-section and then it comes
13 back up on the marsh over on the Seabrook side.

14 Q: And what are the years that you've shown here?

15 A: 2012, 2014, and 2016.

16 Q: What does this show with respect to the channel
17 in the Kiawah River at the neck?

18 A: It shows erosion, encroachment of Kiawah River
19 into the neck right where that escarpment is
20 annotated.

21 Q: And what does it show with respect to the beach?

22 A: It shows accretion between 2012 and 2014 in this
23 area right here which would be just at the upper
24 part of the dry beach level.

25 Q: What is the elevation that you're showing on



1 that top dune ridge, Dr. Kana?

2 A: The highest one?

3 Q: Yes, sir.

4 A: Highest one's about 14 feet above data and NGVD,
5 which stands for National Geodetic Vertical
6 Data. It's approximately mean sea level. And
7 then there's another ridge seaward of that
8 that's at about 13 and a half feet and then one
9 seaward of that that's about twelve feet.

10 Q: Did you also do a ---

11 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 30:**

12 **MR. WALKER:** Your Honor, we would move KDP Exhibit 30
13 into evidence.

14 **MS. ARMSTRONG:** No objection.

15 **MR. CHURDAR:** No objections.

16 **RULING OF THE COURT:**

17 **THE COURT:** It's admitted.

18 **(Respondent's Exhibit Number 30 was admitted into**
19 **evidence.)**

20 Q: Did you also do a profile -- a similar profile
21 ---

22 **THE COURT:** I'm sorry, did you get that? It's
23 admitted. You take off too fast sometimes.

24 **MR. WALKER:** I'm sorry.

25 **THE COURT:** Go ahead.



1 Q: Did you also do a profile of the river closer to
2 the inlet?

3 A: I believe we did a whole series of ---

4 **MR. WALKER:** Will you do 31, please?

5 A: --- whole series of transects like that.

6 **(Respondent's Exhibit Number 31 was introduced into**
7 **the record at this time.)**

8 Q: Would this be one of those profiles that is
9 stationed closer to the inlet?

10 A: Yes, I believe so.

11 Q: What does this show?

12 A: It shows very little bank recession right at
13 that location and it's annotated to say that
14 it's 2,800 feet downstream of the neck and our
15 report would show where station 16 plus 00 is at
16 the neck and where 44 plus 00 is 2,800 feet
17 south of there.

18 Q: Is there a different profile to the river bottom
19 here?

20 A: Yes, it's broader and shallower, considerably
21 shallower.

22 Q: Dr. Kana, can you think of any project, any
23 significant project, affecting the Seabrook and
24 Kiawah shorelines of the last 35 years that you
25 have not been involved in?



1 A: Probably not.

2 **MR. WALKER:** That's all we have at this time, Your
3 Honor.

4 **THE COURT:** Mr. Churdar?

5 **MR. CHURDAR:** Your Honor, I have no questions for
6 this witness.

7 **THE COURT:** Ms. Armstrong?

8 **MS. ARMSTRONG:** I do have probably a long cross-
9 examination. If it's okay with the Court, can
10 we take about a five minute break, please?

11 **THE COURT:** Yeah. Okay.

12 (A break was taken from 10:16 a.m. until 10:29 a.m.)

13 (Petitioner's Exhibit Numbers 45 and 46 were marked
14 for identification purposes during the break.)

15 **COURT REPORTER:** All rise.

16 **THE COURT:** All right. Y'all be seated. Ms.
17 Armstrong?

18 **MS. ARMSTRONG:** Thank you, Your Honor.

19 **DR. KANA - CROSS-EXAMINATION BY MS. ARMSTRONG:**

20 Q: Dr. Kana, inlets are dynamic systems, aren't
21 they?

22 A: Yes.

23 Q: And a spit itself is dynamic, isn't it?

24 A: Yes.

25 Q: The spit's actually migrating, right?



1 A: Yes.

2 Q: It's bounded by a shallow inlet, is that right?

3 A: Yes.

4 Q: And the conventional wisdom is that those kind
5 of areas are unstable in terms of their
6 position, isn't that correct?

7 A: Yes, that's right.

8 Q: So Captain Sam's Spit, you would agree, wouldn't
9 you, that it's geographically and
10 morphologically unstable, wouldn't you?

11 A: Certainly.

12 Q: And it's partly because tidal inlets are the
13 most dynamic features of barrier islands, aren't
14 they?

15 A: Yes.

16 Q: And the instability of the inlet is exactly what
17 has directly caused the erosion that's being
18 experienced on Seabrook Island, correct?

19 A: That's correct.

20 Q: And the areas that are adjacent to inlets and
21 inlet erosion zones are more unstable than areas
22 that are not adjacent to inlets, aren't they?

23 A: Yes.

24 Q: And would you personally buy a lot or recommend
25 building on an area adjacent to an inlet erosion



1 zone?

2 A: I don't own any coastal property because all
3 parts of the coast are vulnerable.

4 Q: But the most vulnerable would be an inlet
5 erosion zone like Captain Sam's Spit, correct?

6 A: It's -- it's a matter of how vulnerable one
7 place is with another and as I've mentioned to
8 you before, private conversations, we generally
9 don't get in the business of recommending
10 whether or not to build in a particular place
11 because of liabilities associated with it. If
12 we're wrong one time, we'd be sued. But what we
13 do try to do is let people know the relative
14 risks they have when they buy at the coast.
15 Some places are less risky than others and, as
16 an example, we did some projects up in Bogue
17 Banks, North Carolina, where there's some ---

18 Q: So are you getting to answer the question about
19 would you personally recommend? Is this -- I
20 want to make sure that that's where we're still
21 going.

22 A: Sure. I would not -- I try not to personally
23 recommend whether or not to buy at a particular
24 location period.

25 Q: Because of the vulnerability?



1 A: Yes.

2 Q: We talked a little bit about the neck. Nobody
3 can say whether there's going to be a breach or
4 when it would happen at the neck, can they?

5 A: No.

6 Q: But if one, if a breach was going to happen,
7 that's the location it would happen, wouldn't
8 it?

9 A: Yes.

10 Q: Are you familiar with Professor Leslie Sautter?

11 A: Yes.

12 Q: And are you familiar with the work that she has
13 done related to the neck at the spit?

14 A: No.

15 Q: You didn't know -- did you know that she was
16 doing any work looking at the spit?

17 A: I had heard that she was doing some work on
18 Kiawah and Folly Beach, but I hadn't received
19 any reports from her.

20 Q: If Dr. Sautter concluded that the spit overall
21 increased proportionally to length, would you
22 agree with that, over time?

23 A: You mean it's growing to the west?

24 Q: Yes.

25 A: Yes, we just talked about that.



1 Q: And if Dr. Sautter concluded that the neck area
2 and the width both had decreased in the past 15
3 years, would you disagree with that?

4 **MR. WALKER:** Objection, Your Honor, to the phrasing
5 of that question. I think she can ask whether
6 he agrees with the premise. He has said he's
7 not familiar with her studies and she's not here
8 going -- she's not going to testify. We, in
9 fact, asked the petitioner whether they wanted
10 to use her information because we didn't know
11 whether to subpoena and depose her. We
12 understood that they weren't. And now the
13 petitioner's trying to get in Dr. Sautter
14 although Dr. Sautter's not testifying. We have
15 no problem with the principal and asking whether
16 Dr. Kana agrees, but our objection is to the
17 hearsay.

18 **MS. ARMSTRONG:** And I'm simply asking him does he
19 agree that the neck area with both ---

20 **THE COURT:** I think he's saying with Dr. Sautter, so
21 I'll ask you to rephrase the question.

22 Q: Dr. Kana, would you agree that the neck area and
23 the neck width have decreased in the last 15
24 years?

25 A: Well, that would take us back to about 2002 and



1 I don't recall the specific positions of the
2 shorelines at those days. I can tell you from
3 the study that we did in 2009 showed that the
4 neck of the spit had gotten wider between, I
5 think, 1999 and 2009. I went through that
6 report just before coming over here. And I
7 believe 2010 and present, there has been a
8 narrowing. And that's largely due to the
9 effects of Hurricane Matthew. But I can also
10 say from our recent surveys that haven't
11 published yet in the annual report, I think
12 we've seen accretion of 50 or 60 feet on the
13 shoreline since Hurricane Matthew, and that's
14 pretty much a normal expectation after you have
15 a big storm and it cuts back the dunes, then you
16 have accretion for a period of time.

17 Q: And let's talk about ---

18 A: But I don't know the specifics. To be able to
19 answer your question, I guess that's what I'm --
20 I'm not trying to avoid -- evade, but I just
21 don't know those specifics.

22 Q: Right. Well, we'll look at a map in just a
23 minute that'll help us with that. But you
24 indicated that the growth that's occurring after
25 Matthew, the majority of that growth is



1 occurring on the very far -- the tip, the west
2 end of the Captain Sam's Spit, isn't that
3 correct?

4 A: Well, there should be seaward growth of the dry
5 sand beach. But one thing I will offer here is
6 that we're less concerned about the position of
7 a say mean high water than we are about the
8 volume of sand that's in the profile. Because
9 that really is a stronger measure of the health
10 or the trend of erosion and accretion. That's
11 why we do these profiles so that -- because the
12 high water line can be all over the place,
13 depending on what day of the week, what tidal
14 cycle you look at, so we generally don't put as
15 much stock on shorelines as we do on profile
16 changes because the profiles will tell us how
17 much sand is out there.

18 Q: And we were -- I think my question was about the
19 growth and where it's occurring, so when that --
20 the sand is accumulating, the sand accumulates
21 -- you know, I can go ahead and put up the
22 exhibit you were looking at and discussing with
23 Mr. Walker. Could we take -- that sand that's
24 building up, builds up down here and accumulates
25 at the west end where the new dune ridges are



1 forming, isn't that correct?

2 A: Yes.

3 Q: Because there aren't new dune ridges that are
4 forming? They're going down here, isn't that
5 correct, not the very fast west end?

6 A: Right. But they're -- they're also extending up
7 the spit after a storm. They're reforming as we
8 speak after Hurricane Matthew.

9 Q: All right. Dr. Kana, I want to do just a little
10 exercise here together. If I mark this right
11 here, you would agree that that's the right
12 scale that's on this map, right? Do you see
13 where I've marked that (indicating)?

14 A: Okay. Uh-huh, yes.

15 Q: So if we look at the distance, it's the black
16 line that is 1979, correct?

17 A: Yes.

18 Q: So we take the narrowest part, and you can tell
19 me if you disagree with me, from the black line
20 up here, the river, to the black line down here
21 on the shoreline ---

22 A: Uh-huh.

23 Q: --- where the beach was in 1979 ---

24 A: Yes.

25 Q: --- that's about right there, you would agree



1 with that? Do you agree with that?

2 A: Right.

3 Q: And then the yellow line is the 2014 shoreline,
4 isn't it?

5 A: Correct.

6 Q: So if we do the same thing for the narrowest
7 part here, the yellow line up here at the river
8 compared to the shoreline, just a little -- just
9 a teeny bit narrower (indicating)?

10 **THE COURT:** I can't see where you're ---

11 A: We can't see the bottom there.

12 Q: All right.

13 **MS. ARMSTRONG:** Sorry, Your Honor.

14 Q: We're just a little bit narrower, but pretty
15 close to the same width, right?

16 A: Right.

17 Q: So there hasn't really been any growth in terms
18 of width of the spit between 1979 and 2014, has
19 there?

20 A: I believe, you know, typically, what you would
21 do in an analysis like that is you would take a
22 series of transects around that neck. You
23 wouldn't just rely on one -- one location and so
24 you would average over -- doing a running
25 average over a number of transects.



1 Q: And some of the things you would look at is
2 actually the height of the dunes, correct?

3 A: Absolutely.

4 Q: Okay. And you did look at the height of the
5 dunes?

6 A: And I believe I just testified that we don't put
7 as much faith in a shoreline that's derived from
8 an aerial photograph or a single contour
9 shoreline because they are subject to quite a
10 bit of fluctuation, depending on what tidal
11 cycle and what time of the month you measure it.

12 Q: So when you're looking at the overall dune
13 height at the neck, I think it wouldn't be over
14 14 feet, is that correct?

15 A: No.

16 Q: And if there's a storm surge that's over 14
17 feet, then it's going to overwash the dunes,
18 correct?

19 A: Correct.

20 Q: Will overwash the highest dunes, right?

21 A: Correct.

22 Q: And South Carolina's seen a number of storm
23 surges that exceeded 15 feet, hasn't it?

24 A: Twice that I'm aware of. Hurricane Hazel and
25 Hurricane Hugo.



1 Q: And when Hurricane Hugo hit McClellanville, the
2 storm surge there was 21 feet, wasn't it?

3 A: Right.

4 Q: If we had a storm like Katrina, we'd have a 27
5 foot storm surge, wouldn't we?

6 A: The -- I don't know the probabilities of storm
7 surges, but the open coast storm surge here at
8 Kiawah's going to be less than the
9 McClellanville storm surge because that was
10 funneled up into Bull Bay. So it's not likely
11 that we would have a 100 year flood elevation at
12 21 feet.

13 Q: You would agree that the dune height at the neck
14 -- the dune has less ridges than -- dune ridges
15 than it does further on at the west end of
16 Captain Sam's Spit, right?

17 A: But it has multiple dune ridges and that's a key
18 -- key factor in the vulnerability of the spit.
19 If you only had a very narrow spit there with
20 one dune ridge that was 14 feet high, the
21 chances of breaching that neck would be much
22 greater.

23 Q: We did have some breaches of the dunes at
24 Captain Sam's Spit within the past year, haven't
25 we?



1 A: Breaches of four dune.

2 Q: Four dune, correct.

3 A: Sure.

4 Q: During Matthew -- when you testified back in
5 2009, you said the dunes were healthy and there
6 were no breaches or washovers, do you remember
7 that testimony? But since that time, as a
8 result of Hurricane Matthew, the beachfront lost
9 the primary dune along the Captain Sam's Spit,
10 didn't it?

11 A: Yeah, and you can see from this diagram here
12 that's up, the four dune, which would be the
13 seaward most, doesn't have as much elevation as
14 the dunes that are more landward. And so a
15 portion of that dune was overtopped or breached
16 during Matthew. And some of that surge went
17 down into the swale behind the dune.

18 Q: And some of the secondary dunes were overwashed
19 also, weren't they?

20 A: Well, I don't know what you call secondary
21 dunes, but depending on where you are on the
22 spit, you might have -- you might interpret it
23 as two or three dunes before you get to where
24 the arrow is pointing down to dune ridges on
25 that diagram. You see the features seaward of



1 the dune ridges that have the arrow to them.

2 Q: And as far as what was lost ---

3 A: This area here (indicating).

4 Q: And that area there is what overwashed ---

5 A: That's multiple ---

6 Q: --- right? Or what was overwashed?

7 A: One might interpret those bumps on those
8 profiles to be multiple dune ridges, okay. I
9 can't say exactly where the overwash was, but we
10 know that the recession during Matthew was in
11 some places over 50 feet. So you can scale that
12 out on these diagrams and see where that might
13 go to.

14 Q: All right. So as far as the recession, you are
15 aware that the town of Kiawah Island measured
16 that at Captain Sam's Spit there was between 100
17 and 120 feet of loss on the beachfront?

18 A: Way down at the south end.

19 Q: Did you know that?

20 A: Yes.

21 Q: On the south end, right.

22 A: Absolutely.

23 Q: And there was less loss on the main part of
24 Kiawah Island that's not the spit, right?

25 A: Correct.



1 Q: It's because it's more dynamic down at the spit,
2 correct?

3 A: Right.

4 Q: And so, of course, we have another storm in
5 South Carolina, the spit's where we're going to
6 experience more damage if it hits at -- at
7 Kiawah Island, right?

8 A: Not necessarily. I mean, one thing that a lot
9 of people don't realize is that we're not as
10 vulnerable to spit breaches as other parts of --
11 -

12 Q: Okay. I wasn't asking ---

13 A: --- the coast.

14 Q: --- about spit breaches, though. What I was
15 asking about is vulnerability and how much
16 erosion we can experience when a storm hits,
17 like Hurricane Matthew, which was just a
18 category I storm, correct?

19 A: Yes.

20 Q: And we experienced more significant erosion on
21 Captain Sam's Spit than the main part of Kiawah
22 Island, right?

23 A: Well, the south end of the spit had more erosion
24 because it was still equilibrating after the
25 inlet relocation of 2015. Remember, Matthew



1 came in a little over a year after the inlet was
2 relocated and the south end of Kiawah spit was
3 still equilibrating around the new inlet. So a
4 lot of sand was being drawn into the new inlet.
5 Rounding off the tip of the spit and so on, so
6 it was still not at equilibrium, in my opinion,
7 a year later.

8 Q: Still wasn't in equilibrium, but I think what
9 you said is that storm events are ultimately
10 what controls how the inlet is affected by
11 different processes.

12 A: I don't believe I testified that storms
13 ultimately control. The spit growth is
14 controlled by the sand supply that's coming down
15 Kiawah. That sand supply is fed by the shoal
16 bypass of Stono Inlet, and the sand moves down
17 the spit and builds the spit to the west. That
18 forces the channel to migrate into Seabrook.

19 Q: And that's ---

20 A: That's a process that is going on say in and day
21 out irrespective of storm occurrences.

22 Q: And that process is one that's been documented
23 since the 1970s. I think it was documented
24 first by Dr. Miles Hayes and his environmental
25 inventory of Kiawah Island is that ---



1 A: Yes.

2 Q: --- right?

3 A: Right. And you know Dr. Hayes, don't you?

4 A: Yes.

5 Q: I mean, you were his graduate student?

6 A: Yes, I was.

7 Q: And so you agree with Dr. Hayes that the spit
8 has breached at least several times in recorded
9 history?

10 A: Yes.

11 Q: Yes. Dr. Hayes when he was preparing his
12 environmental inventory, he used the most
13 reliable historical information available,
14 didn't he?

15 A: To the best of my knowledge. I wasn't part of
16 that study.

17 Q: But you've cited his information repeatedly in
18 your own work, haven't you?

19 A: Yes. And of course, that was 40 years ago.
20 Since then we know a lot more about what's
21 controlling sand transport along Kiawah Island.

22 Q: But our knowledge of the historical events and
23 what Captain Sam's Spit looked like historically
24 hasn't changed, has it?

25 A: Yeah, I -- in many respects it has because of



1 the inlet relocations, may have changed the
2 vulnerability of the beach in a number of ways
3 by shortening up the spit, so that ---

4 Q: Dr. Kana, I'm asking about the history of the
5 spit that was -- has been known and recorded,
6 whether there was any better information or
7 knowledge that we have and maybe I can show you
8 a few documents that would help.

9 THE COURT: Well, I think ---

10 MR. WALKER: Objection, Your Honor. He was
11 responding to the history ---

12 THE COURT: Yeah.

13 MR. WALKER: --- and ---

14 THE COURT: I thought he was responding, too, Ms.
15 Armstrong.

16 MR. WALKER: And he was talking to recent history and
17 it's -- and how the inlet relocations have
18 affected it, so it was responsive.

19 MS. ARMSTRONG: I don't think that was my question.

20 THE COURT: Well ---

21 MS. ARMSTRONG: I don't believe that was my question.
22 I was talking about the environmental inventory
23 and the historic data in the environmental
24 inventory and he started talking about things
25 that have occurred since that time.



1 **MR. WALKER:** Well, I didn't understand the question
2 that way.

3 **THE COURT:** I didn't either because I thought you cut
4 him off. I was sitting here thinking why are
5 you cutting him off. Were you answering her
6 question or not? I mean, do you remember what
7 the question was?

8 **A:** I think she was asking me about the quality of
9 the information that was used to prepare the
10 environmental inventory back in the '70s, is
11 that ---

12 **Q:** That's correct.

13 **A:** --- is that a fair statement?

14 **Q:** Yes.

15 **A:** And I just wanted to offer that I believe the
16 quality of information that we have now is much
17 better and mainly because we've been measuring
18 the volumes of sand that are attaching to Kiawah
19 and moving down. It's a much more quantitative
20 evaluation of stability of Kiawah spit, Captain
21 Sam's Inlet, than we ever had available to us
22 back in the '70s.

23 **THE COURT:** Ms. Armstrong, do you see something --
24 see that exit ---

25 **MS. ARMSTRONG:** Yeah.



1 **THE COURT:** Is there something on the ELMO? Not on
2 that screen that says exit. We can turn -- if
3 y'all want that taken off, I can just turn --
4 there you go.

5 **MS. ARMSTRONG:** Oh, I just touched the menu.

6 **THE COURT:** Well, there you go. Now, I know.

7 **Q:** Dr. Kana, I've got on the screen a page G-59 of
8 Exhibit -- Petitioner's Exhibit Number 7.

9 **(Petitioner's Exhibit Number 6 was introduced into the**
10 **record at this time.)**

11 **A:** Yes, I'm familiar with this.

12 **Q:** 6, I'm sorry. Petitioner's Exhibit Number 6.
13 You're familiar with -- this is taken from Dr.
14 Hayes' Environmental Inventory, isn't it?

15 **A:** Yes.

16 **Q:** And what are the years for which there's
17 information provided regarding the location of
18 Captain Sam's Spit?

19 **A:** 1661 through 1938.

20 **Q:** And do we have any other -- this is the best
21 data that we have for these years about what
22 Captain Sam's looked like, correct?

23 **A:** To the best of my knowledge. I didn't do this
24 original work and I've always just kind of
25 relied on it as general historical background.



1 Q: General historical background ---

2 A: Yeah.

3 Q: --- that you've utilized in your own
4 publications, correct?

5 A: I've repeated it and given the source.

6 Q: And this is page G-61 of Petitioner's Exhibit
7 Number 6. What years are reflected on this?

8 A: 1939 to 1973.

9 Q: And that incorporates the breach that you said
10 you were aware of occurring in the 1940s, is
11 that correct?

12 A: Somewhere around '48 or '49, there was a breach
13 up near the neck.

14 Q: And so these -- you would agree that these two
15 drawings, G-59 and G-61, are designed to show
16 the morphological changes in Captain Sam's Spit,
17 correct?

18 A: Right. And, of course, they're not too -- you
19 know, accurately to scale or anything.

20 Q: They've got a reference point.

21 A: They're more or less a rough sketch.

22 Q: And they've got a reference point that shows the
23 same position over time in each of the images
24 from 1661 ---

25 A: Yeah, if you want to call that a reference



1 point, okay.

2 Q: Well, the arrow says it's a reference, right ---

3 A: Yeah.

4 Q: --- and it's got a little arrow pointed to the
5 same location. And you've referenced and
6 incorporated these specific drawings in peer-
7 reviewed articles that you've published, haven't
8 you?

9 A: As a way of showing what previous literature has
10 been in there. And then what we've tried to do
11 since 1973 is take it a few steps further and
12 really quantify with much more accuracy what's
13 going on in this location.

14 Q: And when you reported this information in your
15 peer-reviewed articles and other publications,
16 you did -- you actually added the 1978 or '79
17 information and incorporated that piece of
18 information into these drawings, haven't you?

19 A: Sure, yes.

20 Q: You presented them at a conference on coastal
21 engineering in Australia in 1980, do you
22 remember that?

23 A: Yes.

24 Q: And you said at that conference that the cycle
25 of breach migration and extension has occurred



1 at least four times since 1661, isn't that what
2 you presented?

3 A: Correct.

4 Q: And when you prepared your report on shoreline
5 stability at Seabrook Island in 1982, you also
6 utilized that data from the Environmental
7 Inventory and incorporated our 1978 and '79
8 image, correct?

9 A: Yes, I believe so.

10 Q: And in 1995, when you were reporting on the
11 inlet relocation at Captain Sam's Spit and
12 Seabrook Island, you again utilized Dr. Hayes'
13 historical information regarding the inlet
14 location over time, didn't you? Do you remember
15 that?

16 A: Yes.

17 Q: And when you presented your updated shoreline
18 assessment and condition of the beach at Kiawah
19 Island in September 1999, you continued to cite
20 Dr. Hayes' data regarding the shoreline history,
21 didn't you?

22 A: Correct.

23 Q: And you didn't include any disclaimer that you
24 didn't believe that that was the best available
25 data, did you?



1 A: Well, in terms of looking at what had happened
2 in the '70s back to the 1600s, we didn't argue
3 with that because we didn't look at those data.
4 We -- but at the same time, we don't put a lot
5 of stock into old historical maps that aren't
6 rectified and have good control points and all
7 these kind of things. We've gone way beyond
8 that, so what we're -- what we've been looking
9 at very closely since the '70s, late '70s, is
10 quantitative measures of how fast the spit is
11 growing to the south, how much volume of sand is
12 accreting on the ocean side of the spit. We've
13 really tried to focus on time periods,
14 particularly since 1980s around the time of the
15 inlet relocation, up to the present. So ---

16 Q: Okay.

17 A: --- we have much better data in those ---

18 Q: Right.

19 A: --- those time periods.

20 Q: That's fine. That wasn't my question though,
21 Doctor.

22 **THE COURT:** Hold on.

23 A: Well, I'm just telling you.

24 **THE COURT:** Hold on one moment. Go ahead.

25 Q: Dr. Kana, what my question was is in these peer-



1 reviewed literature articles and reports that
2 you presented where you recite this historical
3 information, no where did you express that you
4 questioned the reliability of that information,
5 did you?

6 A: No, it was simply repeating what had been before
7 us, which is a standard operating procedure when
8 you're writing a publication, you try to honor
9 or respect the people that have gone before you.

10 Q: In the 1991 or 1999 report that we were just
11 discussing, I'm going to give you a copy of the
12 cover page and some specific pages that I want
13 to ask you about. Does that look like a
14 familiar excerpt of the updated shoreline
15 assessment?

16 A: Yes.

17 Q: And on page five, look at the bottom -- I've
18 selected some excerpts, and page five, numbered
19 page five, do you see where you refer to the
20 Environmental Inventory of Kiawah Island as the
21 first comprehensive look at Kiawah's shoreline?

22 A: You're on page five? I've got page one here.

23 Q: That's page five right there. Does that not --
24 I can't see too well.

25 A: That's page one, page two. I don't see page



1 five here.

2 Q: Do you recall referring to Dr. Hayes' work as
3 the first comprehensive look at the Kiawah
4 shoreline?

5 A: I'm sure I did some place because it was such a
6 seminal report at the time.

7 Q: And if you look at the bottom of page -- I think
8 it's -- I believe it's page 29 now that I've
9 handed it back to you, do you see at the very
10 last sentence where you say in that report that
11 the hope is that this dynamic beachfront area
12 will always remain undeveloped and serve as a
13 natural buffer between the two developments?

14 A: Sure.

15 Q: Do you see that? That's what you said, right?

16 A: Yes.

17 Q: And you were talking about this dynamic
18 beachfront area as being Captain Sam's Spit,
19 correct?

20 A: Yes.

21 Q: And the two developments was the development on
22 the main part of Kiawah Island and Seabrook
23 Island, correct?

24 A: Yes.

25 Q: Dr. Kana, you accept that the climate change is



1 occurring, don't you?

2 A: Yes.

3 Q: And do you agree with the National Oceanic and
4 Atmospheric Administration that as a result of
5 climate change, we're experiencing more frequent
6 and more severe storm events?

7 A: It appears so, yes.

8 Q: And you also would agree that at least one of
9 the effects of climate change is that the sea
10 levels are rising, right?

11 A: Yes.

12 Q: And you've reviewed literature on sea level
13 rise, haven't you?

14 A: Yes.

15 Q: I think that what you said was that sea level
16 was rising in South Carolina at approximately
17 three millimeters a year, do you remember saying
18 that?

19 A: That's very close to the measured rates.

20 Q: It's very close to what?

21 A: The measured rates.

22 Q: And who measures those rates?

23 A: Well, a number of people, but first they start
24 with tide gauge data from places like the
25 Charleston Harbor area where they have long term



1 records, and then these records are compared on
2 the east coast and around the world and
3 integrated to come up with a eustatic rate of
4 sea level rise and then factoring in local
5 effects of subsidence so you can get a local
6 rate of sea level rise. And this is done in
7 many localities around the country, around the
8 world. And then the results are published and
9 updated periodically. I, myself, do not work
10 with those data directly, so I couldn't testify
11 as to the -- all the data analysis that goes
12 into it because it's highly complex. But I'm
13 familiar with the data sets that are published
14 broadly and we utilize those in our work. So
15 there's been a long term trend, as you see from
16 this diagram here that you're just putting up,
17 whatever that exhibit is. Going back to the
18 '20s, you can fit a linear trend line. Linear
19 is simply a straight line through the data,
20 making a best fit. I'm not sure who did this --
21 this particular analysis here, but for the
22 Charleston record there's a rate of sea level
23 rise that is projected in the future. And you
24 can also see all the zig zags up and down lines
25 that there are short periods of time when it



1 shoots up very quickly and then it goes back
2 down and so on, so the average rate of rise is
3 about three millimeters per year.

4 Q: And that's what's reflected in what we're
5 looking at right now?

6 A: Correct.

7 **THE COURT:** How much is three millimeters? Inches
8 and feet.

9 A: Couple -- couple of nickels.

10 **THE COURT:** Oh, okay.

11 Q: So you've seen something that looks like what
12 we're looking at right now?

13 A: Sure, yes.

14 Q: Do you remember preparing a presentation for a
15 conference on dredging beach nourishment and
16 bird conservation?

17 A: Yeah, I ---

18 Q: Do you remember ---

19 A: When was this? You'll have to help refresh my
20 memory.

21 Q: Well, you're the one who did it, so I'm not --
22 I don't think that I could answer that question
23 for you. Do you recall giving a presentation on
24 coastal erosion and habitat creation?

25 A: Yes, I've done a couple of these -- these talks.



1 I can't remember when that one was because I've
2 given so many.

3 Q: And do you still stand by your conclusions that
4 sea level rises at approximately one foot a
5 century, which also -- which equates to about 30
6 feet of beach recession or .3 feet per year of
7 erosion?

8 A: Right.

9 Q: And that's a conservative estimate of one foot
10 a century. Other estimates have sea level rise
11 at two to three feet per century, correct?

12 A: Yeah, back in the '80s, you may recall, our firm
13 did some work for the EPA and we were given the
14 scenarios and we were asked what would be the
15 effect of a certain sea level rise in the
16 Charleston area, so we started with the baseline
17 condition, which is that rise that you just
18 illustrated, baseline being let's say projecting
19 to 2025 or 2075, I think those were the dates we
20 used for that study, what would be -- what will
21 happen in the Charleston or the beaches in the
22 Charleston area if you just keep going at the
23 same rate, okay. And then they said all right,
24 now, let's double it or triple it under a low,
25 medium, and high scenario. So the interesting



1 thing about those studies which were published
2 in the peer-reviewed literature, was that we
3 were actually looking at what would happen in
4 2025 and 2075. Well, we're now at just less
5 than a decade away from 2025 and many of us at
6 the time thought that sea level rise was going
7 to accelerate, so we were looking for that
8 signal and one of the interesting things to me
9 in the last 30 years watching these studies is
10 that sea level rise has not accelerated
11 significantly. It's still rising, but it hasn't
12 created that so-called hockey stick curve.
13 That's what everybody's been waiting for. The
14 projections that we had in the '80s down here
15 were that all of a sudden it was going to take
16 off and create a curve that looks like a hockey
17 stock, okay. But so far the trend lines have
18 been pretty uniform and that's based on quite a
19 few studies of folks from institutions like
20 Scripps and Institute of Oceanography,
21 University of Florida, and some other places
22 around the world. So that seems to be what's
23 happening now. We're still waiting for this
24 acceleration and the implication there is that
25 when you project into the future, the scenarios



1 that we have used over the years, the three
2 millimeters per year rate, we think that's
3 certainly going to hold for the next few
4 decades. And it is possible that it will
5 increase. We keep looking for that -- that bend
6 in the curve and hopefully it won't happen
7 because it's going to be bad news for a lot of
8 people, but right now, the trend is like that.
9 So that's what we base a lot of our modeling and
10 analyses on.

11 Q: Okay. And that ---

12 **THE COURT:** Do you ---

13 A: Sorry to get -- I didn't mean to go in ---

14 Q: No, that's ---

15 A: But I think it's ---

16 **THE COURT:** You said it's two nickels a year, right,
17 about?

18 A: Two or three nickels a year is the rate.

19 **THE COURT:** How do you get to three feet in a decade,
20 does that just add up to that over time?

21 A: Not three feet.

22 **THE COURT:** .3 feet?

23 A: That's the recession of the ---

24 **THE COURT:** I thought you said -- I mean, I think in
25 100 years. Wasn't that the question you asked



1 there, in 100 years, it'll be ---

2 A: This diagram here is saying that if you have a
3 one foot rise in sea level, you can expect about
4 30 feet of beach recession just by flooding ---

5 **THE COURT:** Oh, oh, one foot.

6 A: --- the beach.

7 **THE COURT:** So using those nickels over a century, it
8 adds up to one foot?

9 A: Right, correct.

10 **THE COURT:** Okay.

11 Q: And that would be .3 feet a year of recession of
12 beachfront, correct?

13 A: Yeah, in other words, if the slope of the beach
14 is like this, and sea level starts here, and you
15 raise it a foot. Well, it automatically creates
16 a recession if the beach doesn't change at all.
17 No more sand comes in or goes. So you're going
18 to have -- you're going to see a recession of
19 some magnitude. That's what we're seeing here.
20 And obviously if sea level rises faster or
21 higher in that period of time, it's going to
22 come further up the profile. So we look at that
23 trend, but then we also look at how much sand is
24 coming into an area because most beaches are not
25 static. Some are retreating, they're going



1 landward, and some are building seaward. And so
2 if sea level is going up, but the beach is
3 building landward, you see where it's going to
4 intersect. So the effect will be a landward
5 movement of the shoreline. And, indeed, at
6 Kiawah for the last 30 years, we've seen a
7 landward -- a seaward movement of the shoreline
8 because of excess sand coming in despite the
9 fact that in the last 30 years we've had about
10 three and a half inches of sea level rise.

11 Q: And that hockey stick is something that has been
12 predicted and you accept those predictions that
13 we're going to have an uptake, it may not be in
14 the next, I think you said couple of decades,
15 but you expect that to occur, don't you?

16 A: Well, that's what I expected to see some
17 evidence of back in the '80s when we did these
18 studies. So, now we're 30 years into the future
19 and we can -- so we can look back with a little
20 more certainty at what actually happened and
21 what actually happened is we have a long term
22 secular trend that hasn't changed. Some people
23 have even shown a deceleration in sea level
24 rise, but it's still rising; it's just not the
25 hockey stick effect.



1 Q: But we did get the hockey stick effect, if and
2 when we get there, the erosion rate's going to
3 be more like -- we're going to lose more like .6
4 to one foot of beach a year?

5 A: That's just -- that's what this illustrates. It
6 will increase that rate. But those rates are
7 still ---

8 Q: And that was ---

9 A: --- low ---

10 Q: --- something you produced?

11 A: Those are still low rates relative to the site
12 specific erosion rate where or accretion rates
13 that we have in many parts of our coast so that
14 the whole point of that discussion is to
15 illustrate that site specific erosion effects
16 are more important. They dwarf what's happening
17 with sea level rise. Do you see what I mean?

18 Q: Sea level rise is something that we are going to
19 continue to experience over time, regardless of
20 the erosion or accretion that's occurring.

21 A: Yeah, I'm not arguing with you there.

22 Q: Okay. And you prepared -- you also prepared
23 another presentation back in August of 2014
24 related to the physical condition of South
25 Carolina beaches, do you remember that and does



1 that refresh your memory?

2 A: Right, this is out of a refereed journal article
3 that we prepared on the condition of South
4 Carolina beaches.

5 Q: And as part of that presentation, do you
6 remember putting together this little diagram
7 showing U.S. sea level trends?

8 A: Yes.

9 Q: And you cited to the EPA as a source of your
10 information.

11 A: Yes.

12 Q: And in Charleston, sea level rise over 30 years
13 was three and a half inches.

14 A: Correct.

15 Q: That's what you found, correct. And that
16 correlates with that three millimeter a year ---

17 A: Yes.

18 Q: --- that you referenced? Dr. Kana, are you
19 familiar with the NOAA mapping tool that allows
20 one to look at the vulnerability -- coastal
21 vulnerabilities based on the -- based on the
22 amount of increase in sea level rise?

23 A: No, I may have seen it, but I'm -- I have not
24 used that tool.

25 Q: And before I leave the PowerPoint presentations,



1 the one that we were talking about first, the
2 one related to coastal erosion and habitat
3 creation, in that presentation you identified
4 some of the habitat that threatened birds like
5 ---

6 A: Yes.

7 Q: And that would be threatened birds under the
8 Endangered Species Act, is that what you're
9 referring to?

10 A: Yes.

11 Q: And you identified that those species like
12 dynamic shorelines, correct?

13 A: Yes.

14 Q: They like unstable spits, correct?

15 A: Yes.

16 Q: They like to have large sand surplus, right?

17 A: Yes.

18 Q: Like the sand that's coming down from the Stono
19 Inlet and feeding Captain Sam's Spit, right?

20 A: Yes.

21 Q: And they like having nearby food sources, right?

22 A: Yes.

23 Q: And no predators around, correct?

24 A: Right.

25 Q: And all of those are the conditions that exist



1 at Captain Sam's Spit, right?

2 A: No, not exactly.

3 Q: Okay. What conditions don't exist?

4 A: There's a lot of vegetation on the spit and
5 piping plovers, for example, want bare sand
6 areas in close proximity to the ocean or a
7 lagoon. They just don't like stabilized
8 vegetation. Whether it's dune vegetation or wax
9 myrtle, they -- so these -- many of these
10 endangered species are attracted to exceedingly
11 ephemeral habitat, a habitat that's newly formed
12 like a washover, that doesn't have any
13 vegetation in it, but as soon as that deposit
14 becomes stabilized with vegetation, those
15 species basically take off. And so most of
16 Kiawah's spit is vegetated, so it's not as good
17 habitat as the area where we relocate the
18 inlets, whether it's the east end of Kiawah or
19 the Seabrook side.

20 Q: We're on the same page, Dr. Kana. I was just
21 looking for the exhibit, Respondent's Exhibit
22 Number 28.

23 **(Respondent's Exhibit Number 28 was introduced into**
24 **the record at this time.)**

25 Q: That habitat that's at the very end of Captain



1 Sam's Spit, that's all the sandy overwash area,
2 that's the kind of habitat they like, isn't it?

3 A: Right.

4 Q: And that's the habitat that you dredged up when
5 you did the inlet relocation project, correct?

6 A: Right.

7 Q: I do want to talk a little bit about that inlet
8 relocation project. Now, that project didn't go
9 swimmingly well, would you agree?

10 A: Which one now?

11 Q: The inlet -- the most recent inlet relocation
12 project in 2015.

13 A: I would say it went better than the other two.
14 Each one that we do gets a little bit better.
15 But there are always -- there are always going
16 to be some glitches in any project like this.

17 **(Petitioner's Exhibit Number 45 was introduced into**
18 **the record at this time.)**

19 Q: Does this -- I'm showing you what's marked as
20 Petitioner's Exhibit Number 45. Have you seen
21 this image before?

22 A: Yeah, I'm familiar with it generally. I'm not
23 sure who took that particular photograph.

24 Q: What is this image showing?

25 A: This is during the final closure dyke



1 construction and one of the off-road vehicles
2 there got along the edge of the dyke and started
3 to get undermined as the tide was coming in and
4 sank into the channel and had to be pulled out.
5 Something very similar happened in the 1983
6 project, as well as the 1996 project, because
7 that whole closure sequence is very tricky. You
8 have to work around the tidal cycle and if you
9 don't have enough material there as the tide's
10 coming in, it's very easy for equipment to get
11 undermined. And so the contractors know that
12 risk going in and that's why they have insurance
13 for it.

14 Q: And is this another image showing that equipment
15 falling into the ocean ---

16 A: Right.

17 Q: --- in the inlet?

18 A: Right.

19 Q: And so I think that's another of the same image.
20 So this time you didn't beat the tide, did you?

21 A: Not for that one.

22 **MOTION TO ADMIT PETITIONER'S EXHIBIT NUMBER 45:**

23 **MS. ARMSTRONG:** Your Honor, the petitioners move
24 Exhibit Number 45 into evidence.

25 **THE COURT:** What is Exhibit 45?



1 MS. ARMSTRONG: Pardon?

2 THE COURT: What is Exhibit 45?

3 MS. ARMSTRONG: The images that we were just looking
4 at. I showed Dr. Kana ---

5 MR. WALKER: No objection.

6 MS. ARMSTRONG: --- three images.

7 MR. CHURDAR: No objection.

8 RULING OF THE COURT:

9 THE COURT: It's admitted.

10 (Petitioner's Exhibit Number 45 was admitted into
11 evidence.)

12 Q: I think you testified, Dr. Kana, that it's hard
13 to say exactly whether the inlet relocation was
14 having an effect on the cycle, isn't that what
15 you said? The cycle of breach, elongation ---

16 A: Spit breaching?

17 Q: --- migration, and ---

18 A: I think if anything it's had a positive effect
19 in reducing the threat of a breach by backing up
20 sand along Kiawah spit, by shortening the
21 distance between where a breach would occur and
22 where the new inlet is. If you have two inlets
23 close together, there's -- it's less likely to
24 have a breach.

25 Q: Because you've basically foreshortened the time



1 of a breach?

2 A: Right, it has to do with phasing of the tides.

3 Q: But that inlet relocations haven't actually
4 affected whether there's a major storm that
5 comes through, the vulnerability of the spit
6 hasn't been changed as a result of the inlet
7 relocations, has it?

8 A: Well, I think the inlet relocations have helped
9 allow Kiawah spit to accrete and build up those
10 multiple beach ridges over time, as opposed to
11 say if the inlet hadn't been relocated, that
12 would have sort of stretched out the spit,
13 elongated it more and more of the sand that's
14 going down the spit would have accumulated
15 closer to the Seabrook Island and you can tell
16 the difference. It's sort of like the
17 difference in erosion rates or shoreline changes
18 between the Eugenia Avenue area of Kiawah and
19 the Beachwalker Park area. Eugenia Avenue has
20 -- that's an area that's about one mile from
21 Beachwalker Park. And that area has changed the
22 least over the last 50 years at Kiawah Island.
23 It's right in the -- it's kind of the center of
24 this Park and if they've had any erosion
25 problems at all at Kiawah over the last four



1 years. It's been in that Eugenia Avenue area.
2 And I think we've written in some of our reports
3 that the further away Captain Sam's Inlet is,
4 the more likely whatever erosion is occurring at
5 Eugenia Avenue is going to extend down and
6 toward Beachwalker Park. So by moving the inlet
7 closer, moving Captain Sam's closer to
8 Beachwalker Park, I, in my opinion, would reduce
9 that vulnerability a little bit. And you can
10 see that in the rates of accretion at the end of
11 the spit after we do these projects.

12 Q: I'm talking more specifically about the neck
13 because I thought we agreed earlier that between
14 1979 and I think it was 2014, the width of the
15 neck really hadn't changed that much. It's
16 moved; it's migrated seaward, right?

17 A: Right.

18 **(Petitioner's Exhibit Number 46 was introduced into**
19 **the record at this time.)**

20 Q: Dr. Kana, I'm looking for an exhibit and managed
21 to put my hands on it, it's Petitioner's Exhibit
22 Number 46 and I was asking you about have you
23 seen that sea level rise, I'll represent to you
24 it's taken from the NOAA web page, you see that
25 little NOAA. Do you recognize that as the NOAA



1 ---

2 A: NOAA, I recognize the NOAA logo, but I haven't
3 seen this particular web page.

4 Q: Okay. If NOAA predicted that with two feet of
5 sea level rise, the vast majority of Captain
6 Sam's Spit would be underwater, would you have
7 any reason to disagree with that?

8 **MR. WALKER:** Objection, hearsay. He said he's not
9 familiar with it.

10 **MS. ARMSTRONG:** I'll rephrase the question.

11 **THE COURT:** Yeah.

12 Q: Would you be surprised if at two feet of sea
13 level rise, that Captain Sam's Spit was almost
14 entirely underwater?

15 A: The only way I could buy that argument is if you
16 are incorporating all the marsh with that area
17 because marsh is by definition going to be at
18 about the mean sea level or mean high water
19 elevation, so if you raise it two feet, then the
20 marsh is going to flood. But if you're not
21 including tidal wetlands as a part of the area
22 of Kiawah spit, then most of the elevations
23 there are not going to be flooded directly under
24 a two foot rise because the dunes are, as you
25 showed in the diagram before, they're eight to



1 fourteen feet above mean sea level.

2 Q: Do you know what the height is of the location
3 of the proposed road?

4 A: No.

5 **MS. ARMSTRONG:** Your Honor, could you give me just a
6 minute. I've got a lot of exhibits up here and
7 I want to -- I think I might be close to being
8 done.

9 **THE COURT:** I'll always give you a minute if you're
10 close.

11 Q: Dr. Kana, I just asked you if you knew anything
12 about the height of the road and you don't know
13 anything, you're not familiar with the details
14 of the project that we're here about in court
15 today, are you?

16 A: No.

17 **MS. ARMSTRONG:** I don't have any other questions,
18 Your Honor.

19 **THE COURT:** Re-direct?

20 **DR. KANA - RE-DIRECT EXAMINATION BY MR. WALKER:**

21 **MR. WALKER:** Could we have KDP 30 on the screen?

22 **(Respondent's Exhibit Number 30 was introduced into**
23 **the record at this time.)**

24 Q: Dr. Kana, this is Exhibit 30, you were talking
25 about that I think just one minute ago when you



1 were asked questions about sea level rise. Was
2 this what you were referring to, the transect at
3 the neck?

4 A: Yeah, a two foot rise in sea level would ---

5 Q: Where's sea level on this? Is it the broken ---

6 A: It's near the zero.

7 Q: And so would you show ---

8 A: Zero on the vertical axis.

9 Q: --- The Court where if there were two feet,
10 where that would go?

11 A: Right around there, near that dash line
12 (indicating).

13 Q: All right.

14 A: But you always have to remember that we're
15 talking about a two foot rise in the mean sea
16 level, but mean high water will rise two feet
17 ---

18 Q: Right.

19 A: --- and low water will rise two feet.
20 Everything -- everything will be shifted up by
21 two feet.

22 Q: Well, you were making the point I believe, and
23 I'll ask you a question about it during the
24 cross-examination about the effect of accretion
25 on Kiawah and Captain Sam's despite sea level



1 rise. What is the effect of the accretion? Is
2 the accretion compensating or exceeding the sea
3 level rise basically?

4 Q: Well, it has been historically. Remember, we've
5 been rising at one foot per century and yet
6 these dune lines, these dune ridges, have built
7 seaward because of the excess supply of sand.
8 The old shoreline, it was somewhere way back
9 here back in the 1950s, so everything you see
10 seaward of that diagonal line I just drew is
11 accreted lands and that accretion is due to the
12 excess sand coming in at the east end of Kiawah,
13 work its way down, and some of it being
14 deposited and forming these dune ridges and
15 building seaward despite sea level coming up by
16 one foot.

17 Q: So is it staying ahead or falling behind?

18 A: It's staying ahead on the ocean side.

19 Q: Do you expect that to continue to a reasonable
20 degree of geomorphological certainty for the
21 next few decades?

22 A: Yeah, we just talked about the fact that a one
23 foot rise translates to I think 30 feet of
24 shoreline recession, right. So that's the --
25 that's 30 feet we have to gain to stay ahead of



1 it, or just to stay even with it if it rises a
2 foot. In this case, you can see the scale here.
3 Imagine that the spit has widened by 300 -- over
4 300 feet in whatever that time period would be.
5 If we were to draw -- if we had these kind of
6 data back to 1950, that's about where the line
7 would be.

8 Q: Got it.

9 A: And so it's going out 350 feet. Sea level has
10 cut that back by 30 feet or 20 feet, but we've
11 still gone out 320 feet or something. You see,
12 you get the idea.

13 Q: Is that fairly unusual on the South Carolina
14 coast?

15 A: Well, we have -- we have a number of places,
16 Isle of Palms is like that. There are a few
17 places -- north end of Seabrook is like this.

18 **MR. WALKER:** Could we see the previous exhibit, which
19 I think would be 29?

20 **(Respondent's Exhibit Number 29 was introduced into**
21 **the record at this time.)**

22 Q: All right, and could you remove the line? Do
23 you know how to do that, by hitting ---

24 **THE COURT:** I'll do it.

25 A: There you go. Ah, okay.



1 Q: There we go. Ms. Armstrong asked you some
2 questions about this and I think she was
3 demonstrating that the width of the neck has
4 stayed or is the same width essentially today as
5 it was back in 1979. Do you recall those
6 questions?

7 A: Yes, right.

8 Q: And is that even taking into account the
9 erosional shoreline on the river side?

10 A: Yes, I believe so.

11 Q: So if there had not been the erosion on the
12 river side, would you most probably have
13 expected that the neck would be gaining in width
14 over time?

15 **MS. ARMSTRONG:** Objection, Your Honor. I think Mr.
16 Walker's now exceeded new matters. He's already
17 asked about this exhibit. They talked about the
18 neck; they talked about the width of the neck.
19 There was a lot of testimony on direct about the
20 neck and this is an opportunity to take another
21 bite at the apple. It's not new matter.

22 **MR. WALKER:** I'm responding to the questioning that
23 the width of the spit has remained the same.
24 She did an illustration on a post-it note.

25 **THE COURT:** Yeah, I remember that. I overrule the



1 objection.

2 Q: If, in fact, the river side in the riverbend
3 were not eroding as it has for the last 15 or 20
4 years, what would you expect with respect to the
5 width of the spit in this narrowest location?

6 A: Well, surely, it would have -- it would have
7 widened. And this image, too, this might clear
8 up a point I made earlier, if you'll look at the
9 Seabrook side of the river, the black line here
10 shows the 1979 marsh edge and you notice that a
11 more recent shape of that marsh is like this,
12 you see it's created this almost arrowhead
13 effect that's really pinched the channel right
14 there at the turn and that's what we think is
15 the primary cause of the encroachment on the
16 back side of the neck.

17 Q: You started your work on Kiawah Island and
18 Seabrook around 1970-what?

19 A: Late '70s.

20 **MS. ARMSTRONG:** Objection, Your Honor, this is,
21 again, not ---

22 A: The late 1970s, around ---

23 **THE COURT:** Whoa, whoa, whoa, stop. Go ahead.

24 **MS. ARMSTRONG:** It's not new material. When he
25 started work or how long he's been working there



1 is not anything that I asked him about at all on
2 cross.

3 **MR. WALKER:** I'll qualify.

4 **Q:** Despite sea level rise, has there been the
5 formation of dunes since 1979 in the narrow area
6 of the spit?

7 **MS. ARMSTRONG:** Objection, still -- I mean, just
8 because he puts the words in sea level rise,
9 there's already been extensive testimony on
10 direct about what's happening with the dunes on
11 Captain Sam's Spit, so I don't -- that's not new
12 material just by characterizing it ---

13 **THE COURT:** Well, the new material was sea level
14 rise.

15 **MS. ARMSTRONG:** Right, it's not ---

16 **THE COURT:** And you say despite the new material
17 being sea level rise ---

18 **MS. ARMSTRONG:** I mean, despite you being ---

19 **THE COURT:** --- the questions ---

20 **MS. ARMSTRONG:** Despite -- he's using the term sea
21 level rise and putting it into a question that's
22 already been asked and answered on direct.

23 **MR. WALKER:** There was no qualification of the
24 earlier questions about sea level rise.

25 **THE COURT:** I agree. Because the logic -- your logic



1 is just not pristine because you asked about sea
2 level rise. He turns around and asks a
3 question, despite sea level rise, blah, blah,
4 blah, based on his previous stuff. His previous
5 answer -- previous question indeed would have
6 been objectionable, but now he's taking your new
7 material, adding it to the question and it's now
8 -- it's clearly to me new material. I mean,
9 he's put your -- the new points you made into
10 it.

11 **MS. ARMSTRONG:** He's already testified about what's
12 happening as far as erosion and ---

13 **THE COURT:** I get that.

14 **MS. ARMSTRONG:** --- so I'm not sure like how bringing
15 in -- rephrasing the same question just to add
16 in -- I mean, I don't ---

17 **THE COURT:** Well, I overrule the objection. Go
18 ahead.

19 **Q:** Despite sea level rise since 1979, what has
20 happened with respect to the beach at the
21 narrowest part of the neck of Captain Sam's
22 Spit?

23 **A:** Well, the accretion has happened at a moderately
24 slow rate and that's significant for the simple
25 reason that if the shoreline is healthy and



1 accreting slightly, it gives time for dunes to
2 build up because you're feeding them that one
3 point of the edge of the shoreline. If, by
4 comparison, there was a sudden jump in the
5 shoreline, it jumped seaward by 100 or 200 feet
6 because a shoal came in, you wouldn't have a
7 chance to build the high dunes because a new
8 dune would be forming further seaward. That's
9 what leaves these swales in between the dune
10 ridges. So wherever we see a relatively high
11 dune in South Carolina, that means the
12 shoreline's been kind of stable there for a
13 while. Stable enough that you keep feeding that
14 same location, gradually building up the sand
15 that's accumulating right there until such time
16 as the shoreline jumps seaward. And it jumps
17 seaward, you know, by these sudden influxes of
18 sand that come off inlets or builds spits
19 suddenly, jumps a couple hundred feet. So
20 wherever we see high dunes in South Carolina, we
21 know that shoreline has been relatively stable.
22 It hasn't accreted rapidly, but it hasn't eroded
23 either. And it's -- South Carolina doesn't
24 typically have real high dunes because it's
25 usually changing so quickly. But here on



1 Kiawah, this section of Kiawah, Beachwalker
2 Park, Eugenia Avenue area, it's slowly accreting
3 and so you get to feed these single dunes and
4 you start to develop elevations that get up into
5 the teens, high teens in some cases.

6 Q: And is that considered a high dune in South
7 Carolina?

8 A: Yeah, I would say anything over 15 feet would be
9 high.

10 Q: You were asked a number of questions about the
11 relocation project and you saw some pictures
12 that were admitted into evidence. Have you
13 worked on traditional renourishment projects ---

14 A: Yes.

15 Q: --- that involve dredging?

16 A: Yes.

17 Q: Is there any dredging associated with what's
18 going on with the inlet relocation?

19 A: No, and ---

20 **MS. ARMSTRONG:** Objection, Your Honor. Renourishment
21 is outside of the scope of cross.

22 **MR. WALKER:** Well ---

23 **THE COURT:** She didn't ask anything about
24 renourishment.

25 **MR. WALKER:** Well, I want to ask about -- she



1 suggested through the pictures that there was
2 something environmentally damaging about the
3 inlet relocation and I am about to ask him the
4 comparative benefits and detriments with
5 traditional ---

6 **THE COURT:** If the inlet relocation was -- even if it
7 -- I -- if we go with her questions, what does
8 that have to do with what we're here today? I
9 mean, I don't want you to help her side of the
10 case out, but I'm -- I don't even get the
11 relevance.

12 **MR. WALKER:** All right. I'll move on, Your Honor.

13 **Q:** You were asked a series of questions about storm
14 surges, what if there's a storm surge of 14
15 feet, would a storm surge of 14 feet at any
16 location on the coast cause problems for a
17 beachfront community?

18 **A:** Yes, I believe so.

19 **Q:** Is any beachfront community that you know of on
20 the coast of South Carolina immune to being
21 vulnerable to a 14 foot hurricane surge?

22 **A:** Not that I can think of off the top of my head.

23 **Q:** So Captain Sam's Spit and Kiawah are not unusual
24 in being that vulnerable to a 14 foot surge, are
25 they?



1 A: No.

2 **MR. WALKER:** Thank you, Your Honor.

3 **THE COURT:** Mr. Churdar?

4 **MR. CHURDAR:** I have no follow-up.

5 **THE COURT:** If he raised any new issues.

6 **DR. KANA - RECROSS-EXAMINATION BY MS. ARMSTRONG:**

7 Q: Dr. Kana, I think one of the last things you
8 said was that you considered dunes that are over
9 15 feet to be healthy dunes, is that correct?

10 A: Yes.

11 Q: And the dunes on Captain Sam's Spit are less
12 than 15 feet, correct?

13 A: They're close to 15 feet and that was one
14 transect that we looked at. I believe if we
15 went out there and looked at all the transects,
16 we'd find some that ---

17 Q: And the transect ---

18 **MR. WALKER:** Let him finish his answer, please.

19 **THE COURT:** Yeah.

20 **MR. WALKER:** If you went out -- he was saying if you
21 went out ---

22 A: I think that's why we do multiple transects to
23 draw -- you know, I think all we have to do is
24 look at the data sets and we'll see some that
25 are approaching 15 feet.



1 Q: Approaching.

2 A: Above -- above the NGVD data.

3 Q: But the one that's admitted into evidence that
4 we've been discussing today ---

5 A: I think it's probably closer to 14 feet was the
6 peak on that one.

7 Q: And that was at the neck?

8 A: That transect, I believe, was close to the neck.

9 **MS. ARMSTRONG:** I don't think I have anything else.

10 **DR. KANA - RE-DIRECT EXAMINATION BY MR. WALKER:**

11 Q: Do you consider Captain Sam's Spit in general to
12 have a healthy, strong dune system?

13 A: Yes, relative to many parts of the coast.

14 Q: Thank you.

15 **THE COURT:** You may step down.

16 **DR. KANA:** Thank you.

17 **(The witness was excused.)**

18 **MR. WALKER:** Your Honor, may we take a short break --

19 -

20 **THE COURT:** Yes.

21 **MR. WALKER:** --- before calling our next witness?

22 **THE COURT:** Yes, you may.

23 **MR. WALKER:** Thank you.

24 **(A break was taken from 11:43 a.m. until 11:58 a.m.)**

25 **COURT REPORTER:** All rise.



1 THE COURT: Y'all be seated. Mr. Walker.

2 MR. WALKER: Thank you very much. Respondent, KDP II
3 and KRA Development, LLP, call Mr. John Byrnes.

4 COURT REPORTER: I'm sorry. State your name for the
5 record, please.

6 MR. BYRNES: John Byrnes.

7 COURT REPORTER: Burns, B-U-R-N-S?

8 MR. BYRNES: B-Y-R-N-E-S.

9 COURT REPORTER: B-Y-R-N-E-S?

10 MR. BYRNES: Yes, ma'am.

11 THE COURT: You had to make it complicated.

12 COURT REPORTER: Raise your right hand, please.

13 MR. BYRNES: (Witness complies.)

14 COURT REPORTER: Do you solemnly swear the testimony
15 you're about to give in this matter is the
16 truth, the whole truth, and nothing but the
17 truth, so help you God?

18 MR. BYRNES: I do.

19 COURT REPORTER: Thank you.

20 **MR. BYRNES - DIRECT EXAMINATION BY MR. WALKER:**

21 Q: Mr. Byrnes, what's your profession?

22 A: I'm a professional land surveyor.

23 Q: Where are you working these days?

24 A: I work for Seamon Whiteside and Associates
25 Surveying in Charleston.



1 Q: Where do you live?

2 A: In Charleston, South Carolina.

3 Q: How long have you been with Seamon Whiteside as
4 a surveyor?

5 A: Since 1980.

6 Q: All right. And when did you start out in the
7 surveying business?

8 A: 1980.

9 Q: What was the name of the company then?

10 A: It was called Williams and Associates.

11 Q: Has the name changed over the years?

12 A: Yes, sir.

13 Q: Do you hold any licenses with respect to your
14 surveying?

15 A: Yes, in South Carolina.

16 Q: What license do you hold?

17 A: I'm a professional land surveyor.

18 Q: How many years have you been going out in the
19 field and doing surveys?

20 A: 36, 37.

21 Q: Have you done surveys on Kiawah Island?

22 A: Yes.

23 Q: When was the first time you did a survey on
24 Kiawah Island?

25 A: 1980.



1 Q: Has there been any time since 1980, any extended
2 period of time when you were not doing surveys
3 on Kiawah Island?

4 A: No, sir.

5 Q: Do you have a rough estimate or can you give us
6 a rough estimate of the number of surveys that
7 you prepared on Kiawah Island?

8 A: It would be in the hundreds.

9 Q: Have those surveys included boundary surveys and
10 critical line surveys on Captain Sam's Spit?

11 A: Yes.

12 Q: Does your surveying work include marking areas
13 for review by OCRM to determine the critical
14 line or the separation between the critical area
15 and the upland?

16 A: Yes, sir.

17 Q: How long have you been doing that?

18 A: Since 1980.

19 Q: Are you familiar with the standards and what
20 OCRM looks for in the demarcation of a proposed
21 critical line?

22 A: Yes, sir.

23 Q: And would you tell us what the standard
24 procedure is if you're marking a critical area,
25 sort of the 1, 2, 3s of how it goes?



1 A: We look for the saline vegetation and the
2 elevation, and mark that edge.

3 Q: And what happens after -- what do you mark it
4 with?

5 A: Usually surveying flagging.

6 Q: What is the next step after that?

7 A: We will submit it to OCRM, DHEC OCRM.
8 Typically, they will walk it and typically
9 approve it.

10 Q: All right. So is it normal that your
11 demarcation is accepted?

12 A: Yes.

13 Q: If there's any question, what happens?

14 A: We'll -- they -- DHEC will usually remark it and
15 we'll re-shoot it -- re-delineate it and re-
16 submit it again.

17 Q: For purposes of the line, what points do you
18 then submit? For purposes of the critical line
19 on your survey, what points do you shoot to
20 upload into your survey?

21 A: What DHEC marks usually.

22 Q: Okay. And if DHEC accepts your markings, what
23 points do you upload?

24 A: The points that we would mark, that we flagged.

25 Q: Over the years have you dealt with different



1 persons at DHEC OCRM with respect to obtaining
2 certifications?

3 A: Yes.

4 Q: If the area that you marked is approved, what do
5 you do then in terms of the survey itself to get
6 it officially approved?

7 A: If it's a subdivision plat on Kiawah, we submit
8 it to Charleston County and they either
9 recommend approval or not approval to the Kiawah
10 Review Board.

11 Q: How do you get the official approval of the
12 critical line location?

13 A: That's just -- it's simply a sign off by DHEC
14 OCRM, by their official.

15 Q: Are you familiar with a process called AutoCAD?

16 A: Yes.

17 Q: What is AutoCAD?

18 A: It's computer aided drafting. Pretty much
19 nobody hand drafts any more, it's all done on
20 computer.

21 Q: Are you familiar with and use -- do you use
22 AutoCAD?

23 A: Yes.

24 Q: How frequently do you use it?

25 A: Nowadays, maybe a couple times a day.



1 Q: How many years have you been working with
2 AutoCAD?

3 A: Since 1991 or '92, somewhere in there.

4 Q: Is it considered standard in the industry?

5 A: Yes.

6 **MOTION TO OFFER AS EXPERT:**

7 **MR. WALKER:** Your Honor, at this time, we would offer
8 Mr. Byrnes as an expert in surveying and also in
9 the delineation of areas, as critical area
10 versus highland.

11 **MR. CHURDAR:** No objections, Your Honor.

12 **MS. ARMSTRONG:** Voir dire, if I may, Your Honor.

13 **MR. BYRNES - VOIR DIRE EXAMINATION BY MS. ARMSTRONG:**

14 Q: Mr. Byrnes, you don't -- you're not an expert in
15 biology, are you?

16 A: I'm not a biologist.

17 Q: Do you have -- and you're not a botanist either?

18 A: No, ma'am.

19 Q: You don't have any training in identification of
20 wetland vegetation, do you?

21 A: Freshwater wetlands, no, ma'am.

22 Q: And you haven't gone through any course or
23 training to identify saltwater or freshwater
24 vegetation, have you?

25 A: No.



1 Q: So your only experience when you talk about
2 critical lines is related to actually going out
3 and doing it, is that it?

4 A: Yes, ma'am.

5 Q: And you came about that by other -- from other
6 surveyors or did you just -- how did you decide
7 -- how were you able to decide?

8 A: From the surveyors I worked under when I first
9 started.

10 **MS. ARMSTRONG:** Your Honor, we don't have any
11 objection as long as this witness isn't going to
12 step into the botany, making determinations
13 about vegetation and ---

14 **THE COURT:** I'll just hear your objection at that
15 point then.

16 **MS. ARMSTRONG:** Okay.

17 **RULING OF THE COURT:**

18 **THE COURT:** He's so qualified.

19 **MR. WALKER:** Thank you.

20 **MR. BYRNES - CONTINUED DIRECT EXAMINATION BY MR.**
21 **WALKER:**

22 Q: Have you also conferred with personnel from OCRM
23 in the field about specific designations on
24 occasion?

25 A: Yes.



1 Q: Do you factor the information in that you've
2 learned from others, learned in the field from
3 OCRM into your delineation of critical lines to
4 be submitted for approval?

5 A: Yes.

6 Q: I'm going to start with a question about a king
7 tide. Are you familiar with the phrase that's
8 commonly used now, a king tide?

9 A: Yes, sir.

10 Q: What do you understand that to be?

11 A: I understand it to be a spring tide or a ---

12 **MS. ARMSTRONG:** Objection, Your Honor. I'm not sure
13 this witness is qualified to give opinions about
14 what a king tide is.

15 **MR. WALKER:** I am not ---

16 **THE COURT:** Well, he actually asked what do you
17 understand it to be, but ---

18 **MR. WALKER:** I'm not offering him as an expert in
19 king tides, but there's been some testimony
20 about wetlands and that sort of thing in the
21 petitioner's case and I would like to ask this
22 witness about it.

23 **THE COURT:** Your objection again in that regard?

24 **MS. ARMSTRONG:** To me it seems that goes -- I mean,
25 I'm not sure how he's established what his



1 knowledge is, so what's the foundation and the
2 basis for him knowing what a king tide is?

3 Q: Do you understand a king tide to be a popular
4 phrase for a particular kind of tide?

5 A: Yes, sir.

6 Q: Have you known it by a different name over the
7 years?

8 A: Yes, sir.

9 Q: What have you known it historically as?

10 A: Spring tide.

11 Q: Is there any difference in your mind between the
12 two that you know of?

13 A: No.

14 Q: Do you consider areas that are the upper most
15 reach of water in a king tide to be critical
16 areas simply because the water goes that far up
17 during a king tide?

18 **MS. ARMSTRONG:** Objection, Your Honor, this witness
19 isn't qualified to give an opinion about
20 vegetation based on the -- on water, on the high
21 tide breach.

22 **THE COURT:** Well, he asked critical areas, so he's
23 been qualified as an expert in marking critical
24 areas. He didn't -- he wasn't answering your
25 objection.



1 **MS. ARMSTRONG:** It's not the same thing as
2 vegetation, though. He was asking him
3 specifically about vegetation.

4 **THE COURT:** Were you?

5 **MS. ARMSTRONG:** And the reach of tides.

6 **THE COURT:** Was he?

7 **MS. ARMSTRONG:** Vegetation and a reach of tides.

8 **Q:** Do you consider the uppermost ---

9 **MR. WALKER:** I'm sorry.

10 **THE COURT:** Rephrase the question.

11 **Q:** Do you consider the uppermost reach of water
12 during a king tide to be a critical area simply
13 because it's reached by the king tide?

14 **A:** No.

15 **Q:** Why not?

16 **A:** I'm not sure.

17 **Q:** What factors do you use to determine if it's
18 critical area?

19 **A:** We look at the vegetation, the salt, the saline
20 vegetation.

21 **Q:** Do you look at elevation, as well?

22 **A:** Yes.

23 **Q:** Has the Department ever asserted to you that
24 your demarcations should got to the upper reach
25 of king tides?



1 A: No.

2 **MS. ARMSTRONG:** Objection, Your Honor. Hearsay.

3 He's saying -- asking what the Department said.

4 **THE COURT:** Mr. Walker?

5 **MR. WALKER:** We take the position that the Department
6 interprets and he's in the field and that the
7 fact that they've never challenged one because
8 of the failure to flag a king tide is an
9 indication they don't insist on it.

10 **THE COURT:** Well, that's a different position and
11 question than what you asked, so I sustain the
12 objection.

13 **MR. WALKER:** All right.

14 Q: Has the Department ever insisted that you flag
15 the overreaches of water during a king tide?

16 **MS. ARMSTRONG:** Objection, Your Honor. That is the
17 same -- he's trying to shoehorn in ---

18 **THE COURT:** I overrule that objection.

19 A: Repeat the question.

20 Q: Has the Department ever insisted that you flag
21 upper reaches of water in the king tide for your
22 critical area determination?

23 A: No.

24 Q: When as best you can recall were you first
25 involved in going out on Captain Sam's to do



1 surveys?

2 A: I believe it was around '05, 2005 or 2006.

3 Q: And I'm going to ask you to look at what's Joint
4 Exhibit 1 and I'm going to put it on the screen
5 to make it easier. And I will represent to you
6 that this is a boundary survey of Captain Sam's
7 from 2006.

8 A: Yeah.

9 Q: Are you familiar with this?

10 A: Yes.

11 Q: Who in your office signed off on this?

12 A: Doug DeWolfe.

13 Q: Who is Doug DeWolfe?

14 A: He was a -- he is a -- he was a registered
15 surveyor with Seamon Whiteside -- excuse me with
16 Southeastern Surveying and he's since retired.

17 Q: Now, I'm going to ask our able Dave Roberts here
18 to hone in on what's written in the middle of
19 the white field. No, no, in the middle of the
20 white space, in the large space. Yeah. And
21 what does that signify? What is that
22 measurement?

23 A: It's the area between DHEC OCRM and the mean
24 high water line.

25 Q: And how many acres is that?



1 A: 88.484.

2 Q: Generally, what does the outer line represent in
3 this 2006 survey?

4 A: That is the mean high water line.

5 Q: Was that surveyed at that time?

6 **MS. ARMSTRONG:** Objection, Your Honor, I don't know
7 that this witness has any personal knowledge.
8 He testified somebody else did the survey and
9 now he's starting to speak as though he has
10 personal knowledge and that hasn't -- certainly
11 hasn't been established.

12 **MR. WALKER:** I asked him if he knew.

13 **THE COURT:** Yeah.

14 Q: Do you know where ---

15 **THE COURT:** Find out.

16 Q: --- the mean high water line was, as represented
17 here, was surveyed for purposes of this?

18 A: I do not.

19 **MR. WALKER:** All right. Now, if you would go,
20 please, to -- if we could go to the next sheet,
21 please. There you go. And would you please go
22 into the -- that's it, if you would highlight
23 the wording in the middle of that area, please.

24 Q: Does this contain an acreage calculation?

25 A: Yes.



1 Q: And what is the acreage calculation we're
2 looking at?

3 A: The highland is 40.301.

4 Q: And what is the total?

5 A: Total is 133.49 acres.

6 Q: As used in this context, what does highland
7 mean?

8 A: It's the developable land.

9 Q: All right. Was the critical line certified by
10 OCRM here?

11 A: Yes, sir.

12 **MR. WALKER:** Would you go back to the little box? It
13 has a signature there.

14 Q: Is that the certification of the critical line,
15 there?

16 A: Yes, sir, that's Fred Mallett's signature.

17 **(Joint Exhibit Number 2 was introduced into the record**
18 **at this time.)**

19 Q: Okay. Now, I'd like you to take a look at Joint
20 Exhibit 2. Can you see when this survey was
21 prepared?

22 A: Looks like May 2011, May 2nd.

23 Q: All right. There's a -- could you please go
24 back to that? Now, a couple lines down from the
25 top it says check -- over on the right, check



1 JTB, who is that?

2 A: That's me.

3 Q: What did you do with respect to this?

4 A: I supervised the drawing of it.

5 Q: All right. Was this also a boundary plat?

6 A: Yes.

7 Q: What is the title of this survey? Should be
8 down at the bottom or off to the side, excuse
9 me, on the right.

10 A: A boundary survey of Captain Sam's Spit
11 containing 152.567 acres.

12 Q: Does this survey also include an acreage
13 calculation?

14 A: Yes.

15 Q: If you would please -- there you go, you found
16 it. And what is the acreage on here? First,
17 let's go with TMS, at the top, 20705000011.

18 A: It's 133.491.

19 Q: And then when we come down to the highland
20 there, what does it show as highland in that
21 same parcel for Captain Sam's?

22 A: 43.368.

23 Q: Was there anything that occurred between 2006
24 and 2011 that would have influenced the
25 developable highland?



1 A: Yes.

2 Q: What happened?

3 A: The DHEC OCRM baseline was revised.

4 Q: And it was revised in which fashion did it move?
5 Seaward or landward?

6 A: It moved seaward.

7 Q: Thank you. Now, if we could go to sheet four,
8 there you go. What is that area that has the
9 little dimples in it in the upper part of the
10 screen?

11 A: I'm not sure what you're -- what you're
12 referring to.

13 Q: There's an area with little -- let me ask you
14 this. Is the marsh shown in this?

15 A: Yes.

16 Q: What area is the marsh area?

17 A: It's this area here (indicating).

18 Q: Are there coordinates shown for the different
19 lines for the marsh?

20 A: They're not coordinates, but they are metes and
21 bounds.

22 Q: Are there metes and bounds shown?

23 A: Yes.

24 Q: Was that critical line approved?

25 A: Yes.



1 (Joint Exhibit Number 5 was introduced into the record
2 at this time.)

3 Q: Let's now go to Joint Exhibit Five. Is this
4 another survey that you were also involved in?

5 A: Yes, sir.

6 Q: What is the date of this?

7 A: September 24th, 2014.

8 Q: Was the critical line certified by OCRM on this
9 survey?

10 A: Yes, yes.

11 MR. WALKER: You can go above that, please. See the
12 second box that's above that.

13 Q: Who signed that?

14 A: Bill Eiser on October 7th, 2014.

15 Q: Now, is there an acreage calculation of the
16 large Captain Sam's spit to -- on the left
17 bottom?

18 A: Yes.

19 Q: What is the calculation?

20 A: 173.698 acres.

21 Q: Does that include a second TMS parcel?

22 A: I believe so, yes, sir.

23 Q: And where is that TMS parcel in relation to the
24 larger parcel?

25 A: It's to the east of it.



1 (Joint Exhibit Number 8 was introduced into the record
2 at this time.)

3 Q: Now, the last one of these I'm going to show you
4 is Joint Exhibit 8. Is that yet another
5 boundary survey?

6 A: Yes.

7 **MR. WALKER:** If you could go to the corner.

8 Q: Were you involved in this, as well?

9 A: Yes.

10 Q: What is the date of this one?

11 A: June 14, 2016.

12 Q: And if you look diagonally up to the left, is
13 there a certification -- a signed certification
14 from OCRM?

15 A: Yes.

16 Q: How many signatures there?

17 A: Two.

18 Q: Why were there two? If you could go to the
19 larger ---

20 A: The two signatures are Blair Williams and Fred
21 Mallett. Fred -- and if you look in the upper
22 right-hand corner ---

23 Q: You can touch the screen.

24 A: If you look here, there is a pond right there.
25 Fred Mallett signed off on that pond. Blair



1 Williams signed off on the rest of the critical
2 line (indicating).

3 Q: Let's talk about the process for this critical
4 line. Would you tell us how you marked the
5 critical line along the riverbank at the neck?

6 A: We flagged it with surveying flags.

7 Q: Did OCRM accept that?

8 A: No.

9 **MS. ARMSTRONG:** Objection, Your Honor. I think he --
10 I don't -- I'm not clear that he actually said
11 -- he's putting words in the witness' mouth that
12 you flagged this. I haven't heard -- there
13 hasn't been any testimony indicating that this
14 witness actually did this, so he's really
15 leading him instead of asking, did you -- what
16 work did he do or did he flag it.

17 **THE COURT:** So your objection is to leading?

18 **MS. ARMSTRONG:** It's leading.

19 **THE COURT:** Okay. Rephrase.

20 Q: Who flagged this?

21 A: DHEC OCRM.

22 Q: I mean before DHEC OCRM, who on the ---

23 A: One of my surveyors.

24 Q: And what happened when you -- did you request
25 review by DHEC?



1 A: Yes.

2 Q: What happened?

3 A: They reviewed it and reflagged it.

4 Q: Did you come out to the shoreline when DHEC was
5 out there?

6 A: Not in 2014, no.

7 Q: Did you at a later time?

8 A: I believe it was 2015.

9 Q: Okay. What points did you then use for your
10 survey of the critical line?

11 A: The points that DHEC flagged.

12 Q: And after you -- did you then submit your
13 drawing of the reflagged critical line to DHEC?

14 A: Yes.

15 Q: Was that the end of it?

16 A: No.

17 Q: What happened next?

18 A: They wanted an AutoCAD drawing of the -- of the
19 survey.

20 Q: What would the AutoCAD allow DHEC to do?

21 A: They could verify and check and make sure we'd
22 doing everything correctly.

23 Q: In your 35 years experience, have you ever had
24 a situation on another piece of property where
25 DHEC requested the AutoCAD file?



1 A: No.

2 Q: Was there a critical line survey in 2015 where
3 you were actually present on the riverbank for
4 purposes of the delineation of the critical
5 line?

6 A: Yes.

7 Q: Tell us, were you there with personnel from DHEC
8 OCRM?

9 A: Yes.

10 Q: And what happened?

11 A: They flagged the line and they flagged it very
12 stringently.

13 Q: What do you mean by that?

14 A: I would say every one to two feet they flagged
15 it. In certain areas, not the whole length, but
16 in certain areas, they flagged it one to two
17 feet apart.

18 Q: Have you ever had the Department be that
19 specific?

20 A: No.

21 Q: And what coordinates did you use for that 2015?

22 A: Same four, this -- same four.

23 Q: Looking at this 2016 survey, which has been
24 marked as Joint Exhibit 8, if you go to page
25 three, sheet three, does the marsh area in the



1 upper right show whether there is a valid
2 critical line certification for the marsh?

3 A: Yes.

4 Q: Is there or was there at this time, the marsh
5 line?

6 A: Was there what?

7 Q: Was there a valid critical line on the survey,
8 reflected on this survey?

9 A: Yes.

10 Q: What was the date of that?

11 A: I'm not sure.

12 Q: Would it help to enlarge it?

13 A: Yeah. It looks like 5. That would be May 9th,
14 2015.

15 Q: Would that have been the 2015 survey you were
16 talking about earlier?

17 A: Yes.

18 Q: At that time, did you and/or your crew actually
19 go out and physically relocate all the metes and
20 bounds for that marsh edge?

21 A: No.

22 Q: Were you ever instructed to do that?

23 A: No.

24 Q: In your many years of surveying at Captain
25 Sam's, based on your observations, has there



1 been much change in that marsh line on the back
2 side?

3 A: No, sir.

4 Q: All right. I'm going to change gears a little
5 bit and focus on the critical line at the neck.
6 At our request, did you put together a
7 compilation showing the location of the critical
8 line at the neck for various approved critical
9 line surveys?

10 A: Yes.

11 **(Respondent's Exhibit Number 42 was introduced into**
12 **the record at this time.)**

13 Q: Is this the compilation that we were just
14 referring to?

15 A: Yes.

16 Q: And what did you do in order to put this exhibit
17 together?

18 A: We took the five or six critical lines that were
19 approved by DHEC and put them all together.

20 Q: Does the legend box that was just enhanced show
21 the dates of those critical lines?

22 A: Yes.

23 Q: Were all of those certified at different times?

24 A: Yes.

25 Q: All right. Does this show, and we're now



1 looking at the eastern most portion, the eastern
2 most sheet, does it show erosion over time
3 adjacent to the parking spaces at Beachwalker
4 Park?

5 A: Yes.

6 Q: What were you showing in the two circles on the
7 left, the slightly smaller circles on the left?

8 A: On the top one, we showed the critical line,
9 certified critical line moving landward.

10 Q: So between 2010 and 2015, how much had it moved?

11 A: 8.23 feet.

12 Q: What is the area we're talking about?

13 A: What do you mean?

14 Q: Is it -- what's it adjacent to?

15 A: The parking lot at Beachwalker County Park.

16 Q: Did you measure that same distance for a year
17 later in 2016?

18 A: Yes.

19 Q: How much had it advanced or what was the ---

20 A: 10.38, couple feet.

21 Q: Very good. Did you also do a similar exhibit
22 for the shoreline at the narrowest part of the
23 neck?

24 A: Yes.

25 Q: Can we see the next sheet? What do the circles



1 around the larger circles show?

2 A: The first one on the top left shows the distance
3 from the DHEC OCRM setback line to the critical
4 line. I don't know the date on that one.

5 Q: Is that 2006?

6 A: I think it's 2006, yes.

7 Q: You can -- you can see it in the next photo, but
8 yeah, that's 2006.

9 Q: And what was the distance between the river
10 critical line in August 2006 and the OCRM 2009
11 setback line?

12 A: 97.52.

13 Q: Let's go to B. Can you tell us which critical
14 line we're looking at in B?

15 A: It's the red line and it's 2010.

16 Q: What was the distance between the OCRM critical
17 line in August 2010 and the 2009 setback line?

18 A: 64.43.

19 Q: Then if we go to C, when was that critical line
20 established?

21 A: That was 2011.

22 Q: What was the distance between the certified
23 critical line in June 2011 and the 2009 setback
24 line?

25 A: 60.26.



1 Q: Now, if we drop down to the bottom over the left
2 side to D, what is the -- the date of that
3 critical line for comparison?

4 A: That is 2015 or is '14?

5 Q: On D, if you -- down below.

6 A: I think it's 2014.

7 Q: And what is the distance between the critical
8 line and the setback line then?

9 A: 39.41.

10 Q: Then the next one, E, appears to be June 2015
11 around the time these permits were issued. What
12 was the distance then?

13 A: 37.06.

14 Q: Finally, in May of 2016, what was the distance
15 between the critical lines certified in May or
16 June of 2016 and the 2009 setback line?

17 A: 29.25.

18 Q: Now, we go to the final sheet. That doesn't
19 have any circles for specific comparisons, but
20 what does it show?

21 A: It shows the five or six critical lines that we
22 shot from '06 to 2016.

23 Q: Very good.

24 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 42:**

25 **MR. WALKER:** Your Honor, we move Respondent's Exhibit



1 42 into evidence.

2 **MS. ARMSTRONG:** No objection.

3 **RULING OF THE COURT:**

4 **THE COURT:** It's admitted.

5 **(Respondent's Exhibit Number 42 was admitted into**
6 **evidence).**

7 **Q:** After Hurricane Matthew last year, were you
8 asked to go out and measure the distance between
9 the setback line and the mean high water line on
10 Captain Sam's at the narrowest part?

11 **A:** Yes.

12 **Q:** Did Seamon Whiteside go out and do that?

13 **A:** Yes.

14 **Q:** A week or two weeks ago, were you asked to go
15 out and take that same measurement?

16 **A:** Yes.

17 **Q:** Did you prepare a simple drawing of those
18 distances?

19 **A:** Yes.

20 **(Respondent's Exhibit Number 20 was introduced into**
21 **the record at this time.)**

22 **Q:** Let's go to Exhibit 20. I'm going to enhance
23 this. In November -- which line is November of
24 2016, right after the storm?

25 **A:** I believe ---



1 **MS. ARMSTRONG:** Objection, Your Honor. I'm not sure
2 if Mr. Walker is intending to introduce this or
3 not, but this document goes to my Motion in
4 Limine that we raised on Monday. There were two
5 separate grounds, if you remember, related to
6 Dr. Folk, but there was also related to
7 documents that we had just received and this was
8 one of the documents we had just received on
9 Friday without any time to conduct any discovery
10 on it to understand how it was created. I
11 haven't heard any evidence or any testimony from
12 Mr. Byrnes about even his ability to -- he's a
13 surveyor, I don't know that he's testified about
14 being able to -- to any scientific degree about
15 being able to determine what the mean high water
16 line is or how he's qualified to do that. It
17 certainly exceeds the qualifications that The
18 Court just laid out recently and this was
19 definitely a surprise and we felt ambushed by a
20 brand new document, trying to figure out what it
21 meant on the eve before trial, so we would
22 object to any questions related to this
23 document.

24 **THE COURT:** Mr. Walker?

25 **MR. WALKER:** We simply had a -- first of all, we



1 simply had a measurement prepared to show -- the
2 whole purpose was to show where the beach is now
3 in relation to last November after the storm,
4 and we couldn't take that measurement until
5 recently for the purpose of showing how the mean
6 high water mark has moved seaward. I'd be happy
7 to ask Mr. Byrnes about his experience with the
8 mean high water mark and what that is in
9 surveying.

10 **THE COURT:** Okay.

11 Q: How many years have you been shooting or
12 calculating or determining mean high water line?

13 A: 30-plus.

14 Q: How do you determine that?

15 A: On Kiawah, we use the 3.2 feet NGVD 29 as the
16 mean high water line.

17 Q: Is that a standard accepted elevation for mean
18 high water?

19 A: No, it changes as you go up and down the coast.

20 Q: But for Kiawah Island?

21 A: Yes.

22 Q: Is that the standard that's accepted in the
23 industry for mean high water on Kiawah Island,
24 that elevation?

25 A: Yes.



1 Q: Are you able to determine that with the
2 instruments that you have?

3 A: Yes.

4 Q: When you go out to shoot mean high water, what
5 elevation are you shooting for?

6 A: 3.2.

7 Q: Is that what you did when you were asked to
8 measure the mean high water line right after the
9 storm and then immediately before this trial?

10 A: Yes.

11 **MR. WALKER:** So we would -- Your Honor, we would
12 submit that he is qualified to do that and he's
13 explained exactly what that means.

14 **THE COURT:** How about her argument that this was a
15 surprise, that she wasn't prepared?

16 **MR. WALKER:** Well, I have two. And that is that
17 we're entitled to do demonstrative exhibits for
18 sure.

19 **THE COURT:** Okay.

20 **MR. WALKER:** And we're entitled to -- he can go out
21 there at any time and take the measurements and
22 he can testify to it and having the exhibit
23 doesn't really change the substance of it. Mr.
24 Byrnes was never anybody -- he was disclosed
25 from the first day as a witness, no deposition



1 was ever taken of Mr. Byrnes.

2 **THE COURT:** Okay, al right. Any response?

3 **MS. ARMSTRONG:** Sure, it's just -- I mean, a new
4 piece of evidence coming in. I agree he can
5 testify, although this Court has limited in this
6 case the witness' ability to testify about work
7 done after a deposition, I realize ---

8 **THE COURT:** Yeah, yeah.

9 **MS. ARMSTRONG:** --- there hasn't been a deposition
10 here. This is a new piece of evidence and we
11 didn't review the paper discovery requests for
12 production of documents and so at this point,
13 the objection's really to the admissibility of
14 this coming in.

15 **THE COURT:** Because of ---

16 **MS. ARMSTRONG:** Because of the late -- because it
17 wasn't done with enough time for us to
18 investigate what it meant. I mean, the whole
19 purpose of discovery is to get documents from
20 the other side ---

21 **THE COURT:** How long ago did you give this to her?

22 **MR. WALKER:** Well, this was -- we gave it to the
23 other side within a day of receiving it.

24 **THE COURT:** Well, when did you receive it?

25 **MR. WALKER:** I think it was ---



1 **MS. ARMSTRONG:** Well, we received it at 4:05 ---

2 **MR. WALKER:** The week -- like the Thursday before
3 trial.

4 **THE COURT:** Okay.

5 **MS. ARMSTRONG:** So we got it the Friday before trial
6 at 4:05 in the afternoon.

7 **THE COURT:** Y'all had a surveyor too, correct?

8 **MS. ARMSTRONG:** We did and he produced -- he produced
9 all of that long before this.

10 **THE COURT:** Well, as a survey -- were you able to
11 give this to your surveyor?

12 **MS. ARMSTRONG:** We did give this to our -- I gave it
13 to -- I mean, I e-mailed it to him. I didn't
14 have a chance to work with him to discuss what
15 it meant or the implications of it because we
16 got it the day before ---

17 **THE COURT:** I know, that was -- we've been in a week-
18 long trial. You called him; he's been up here.
19 You weren't able to discuss it with him when he
20 was up here?

21 **MS. ARMSTRONG:** I mean, by the time that we got this,
22 we were on a track and there were things that --
23 pieces of work that I needed to do with him that
24 weren't figuring out an entirely new piece of
25 evidence that we didn't get until the day before



1 trial started.

2 **THE COURT:** Anything else? Mr. Walker?

3 **MR. WALKER:** It is the simplest of exhibits. It's
4 not as though we're ---

5 **THE COURT:** Yeah.

6 **MR. WALKER:** --- trying to introduce ---

7 **THE COURT:** I see that.

8 **MR. WALKER:** Yeah.

9 **THE COURT:** I overrule the objection.

10 Q: There are three lines and we may need to go back
11 out a little. If you go to the legend in the
12 upper left, what are the ---

13 **THE COURT:** Hold on one moment. Go ahead.

14 Q: What are the three lines we're looking at,
15 please?

16 A: The blue line was the mean high water line in
17 May of 2011; the red line is November 2016; and
18 the pink line is August 2017.

19 Q: All right.

20 **MR. WALKER:** If you'd focus in on that area. Can you
21 enhance the distances? There you go.

22 Q: In November of 2016, within a month or so of
23 Hurricane Matthew, what was the distance between
24 the OCRM setback line and the mean high water
25 line?



1 A: 342.5 feet.

2 Q: When you went out there two weeks ago and had it
3 measured, what was the distance?

4 A: 400.8 feet.

5 Q: What is the approximate difference between the
6 two?

7 A: 58 feet.

8 **MR. WALKER:** Your Honor, I've got one more exhibit to
9 examine him on, but it may take about ten or
10 fifteen minutes. I'm happy to keep going if you
11 would like or we can break. Whatever suits the
12 Court.

13 **MS. ARMSTRONG:** I mean, if it's ten or fifteen
14 minutes, that's fine with me.

15 **MR. WALKER:** All right. I will proceed.

16 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 20:**

17 **MR. WALKER:** We would move 20 into evidence, which is
18 the comparative distances.

19 **THE COURT:** I'm thinking ---

20 **MS. ARMSTRONG:** Yeah, I mean, we're objecting to it
21 without having an opportunity to work on what
22 the meaning of this exhibit is, how it fits into
23 our case. We started our case on Monday, so it
24 was at that point I just didn't have the time to
25 be able to work through it with my own expert.



1 THE COURT: I overrule the objection.

2 MR. WALKER: Is it admitted, Your Honor?

3 RULING OF THE COURT:

4 THE COURT: Oh, it's admitted.

5 (Respondent's Exhibit Number 20 was admitted into
6 evidence).

7 Q: Mr. Byrnes, were you provided a copy of a
8 diagram that was prepared by a Mr. Wood
9 indicating where he thought the critical line
10 should be in the neck area at the riverbend?

11 A: Yes.

12 (Respondent's Exhibit Number 19 was introduced into
13 the record at this time.)

14 MR. WALKER: Could we put up Exhibit 19, please? Go
15 to the very last page.

16 Q: All right. Is this what you were referring to?

17 A: Yes.

18 Q: For the record, I think this is Plaintiff's
19 Exhibit Twelve, ignoring the little bit of ink
20 in the river above ---

21 THE COURT: And ignoring the exhibit number ten on
22 it?

23 MR. WALKER: That was the deposition.

24 THE COURT: Okay.

25 MR. WALKER: It was Wood deposition Exhibit 10.



1 **THE COURT:** Okay.

2 Q: Is that what you saw?

3 A: Yes.

4 Q: At our request, did you go out to inspect the
5 turquoise line areas that Mr. Wood asserted
6 should be critical areas?

7 A: Yes.

8 Q: Did anybody go with you?

9 A: Yes.

10 Q: Who?

11 A: Mark Lamar.

12 Q: Did one of you take pictures?

13 A: Mark Lamar took pictures.

14 Q: We're going to be going location to location
15 starting on the east side and first at number
16 one where there's a little finger that was shown
17 by Mr. Wood. Did you examine that area?

18 A: Yes.

19 Q: Is it visible on the pictures?

20 A: Yes.

21 Q: Could you show us with your hand what he's
22 talking about?

23 A: Right in here (indicating).

24 Q: In your estimation -- first, did those pictures
25 accurately depict the area, Exhibit One?



1 A: Yes.

2 Q: I mean, location one?

3 A: Yes.

4 Q: In your estimation, based on your experience and
5 training and dealings with DHEC over the years,
6 should that be marked critical area?

7 A: No.

8 Q: Why not?

9 A: I didn't see any saline vegetation; there wasn't
10 any saltwater intrusion in it; and we were there
11 almost at high tide, just a little bit before
12 high tide.

13 Q: Can you see the tide in this picture?

14 A: Yes.

15 Q: Was it even close to coming in there?

16 A: No.

17 Q: Let's go to location number two.

18 **MR. WALKER:** Thank you, Your Honor.

19 Q: Are the pictures here for location number two a
20 fair and accurate representation of when you
21 were out there?

22 A: Yes.

23 Q: Can you also see the tide?

24 A: Yes.

25 Q: How close is it coming to the escarpment?



1 A: Probably within a couple of feet.

2 Q: Did you examine this area that's also shown as
3 an indentation?

4 A: Yes.

5 Q: Can you show us where on these pictures that
6 this area is?

7 A: Area right here (indicating).

8 Q: All right. Did you determine whether in your
9 estimation it should be marked as critical area
10 or not based on your experience, training, and
11 dealing with DHEC OCRM?

12 A: It should not have been.

13 Q: Why?

14 A: Again, there was no saline vegetation and no
15 saltwater intrusion in there.

16 Q: Let's go to number three.

17 **MS. ARMSTRONG:** Your Honor, I'm going to move to
18 strike his last answer. He's already said he
19 doesn't have any experience or training with
20 respect to vegetation. He's not a botanist.
21 That's I think beyond his ---

22 **THE COURT:** Mr. Walker?

23 **MS. ARMSTRONG:** --- his expertise.

24 Q: Mr. Byrnes, over your -- during your 35 years of
25 on-the-job training ---



1 **THE COURT:** Well, wait a second. I need to make a
2 ruling on that. Do you wish me to strike -- I
3 could strike that testimony and just allow you
4 to develop it or do you have a response to the
5 objection?

6 **MR. WALKER:** I have a response and that is that he's
7 qualified to determine critical areas. He may
8 not be a botanist, but he's gone out there for
9 35 years and he has marked lines that he can
10 visually identify what's saline vegetation and
11 what is not and that's what he's been doing the
12 whole time and OCRM has accepted his
13 designation, so whether he knows the Latin name
14 really doesn't matter. I mean, he -- an expert
15 can be an expert through experience and
16 training. It doesn't have to be academic. And,
17 clearly, he has the training to identify what
18 OCRM has typically characterized as saline
19 vegetation.

20 **THE COURT:** If he's been doing critical lines for 30
21 years, why would that not be sufficient
22 experience for him to testify as to the plants
23 that identify critical lines?

24 **MS. ARMSTRONG:** I didn't hear any testimony that he
25 is able to identify saline vegetation, that



1 that's part of his experience. And on cross,
2 you're certainly going to hear about how he --
3 what he uses from our perspective and what he's
4 testified to in a sworn affidavit as how he
5 identifies the critical line. But it certainly
6 hasn't -- he hasn't given any -- explained any
7 expertise for assessing what's saline vegetation
8 and what's not.

9 **THE COURT:** All right. Out of an abundance of
10 caution, I'm going to strike his answer about
11 the vegetation, but allow you to proceed down
12 that path.

13 **Q:** For the last 30-plus years into your field work
14 flagging critical lines, have you come to
15 identify what OCRM considers saline vegetation?

16 **MS. ARMSTRONG:** Objection, Your Honor. I don't have
17 that. There's no foundation for what OCRM
18 considers. I mean, this ---

19 **MR. WALKER:** All right. I will rephrase it

20 **Q:** In your 35 years of working with -- under
21 people, with people, with agencies, and going
22 out and doing delineations sometimes with the
23 agency present, have you come to be able to
24 identify saline vegetation in your estimation?

25 **A:** Yes.



1 **THE COURT:** Proceed.

2 Q: Did this area two show any saline vegetation?

3 A: No.

4 Q: Do you know what marsh grass is?

5 A: Yes.

6 Q: Was there anything -- was there any marsh grass?

7 A: No.

8 Q: Was the elevation even close to this high tide?

9 A: No.

10 Q: Was there any intrusion in the area in this high
11 tide?

12 A: No.

13 **MR. WALKER:** Could we go to three, please?

14 Q: Could you identify with your finger the two
15 little bump areas that Mr. Wood seems to have
16 identified?

17 A: (Witness does as requested.)

18 Q: You have marked on this exhibit a little semi
19 circle around two white posts.

20 A: Uh-huh.

21 Q: Did you put those there?

22 A: No, sir.

23 **THE COURT:** Can you mark that on the top exhibit,
24 too, so I'll ---

25 A: (Witness does as requested.)



1 **THE COURT:** Thank you.

2 Q: In your estimation, was this area critical area?

3 A: No.

4 Q: Why not?

5 A: I didn't observe any saline vegetation. The
6 water -- the saltwater was not in there.

7 Q: Did you see any sign of a periodic inundation
8 there?

9 A: No.

10 Q: Was the soil discolored up there?

11 A: No.

12 **MR. WALKER:** Will you please go to the next one which
13 is four?

14 Q: Does this, or these two photographs show the
15 area identified as four?

16 A: Yes, sir.

17 Q: Again, for The Court's sake and our sake, would
18 you use your finger to mark the area?

19 A: (Witness does as requested.)

20 Q: Did you determine whether or not in your
21 estimation that should be critical area?

22 A: Yes, it was.

23 Q: Were these areas like this the last time, the
24 ones we've gone over so far, like this the last
25 time OCRM certified the critical line in 2016?



1 A: Yes.

2 **MR. WALKER:** Can we please go to number five?

3 Q: Now, we have a whole host of pictures about area
4 number five, which is the larger one, and if you
5 could ---

6 **MR. WALKER:** Dave, if you could show us the next
7 couple of pages because we've got several angles
8 and -- keeping going as long as it says five,
9 and then we'll come back. All right, go back,
10 please.

11 Q: All right. What did you -- first, do these
12 pictures accurately represent the area that Mr.
13 Wood -- that we've marked as five?

14 A: Yes, sir.

15 Q: And what did you observe here?

16 A: The same thing. I didn't see any saltwater
17 vegetation or saltwater intrusion.

18 Q: Well, let's go a couple slides in. Did you see
19 dead vegetation?

20 A: Yes.

21 Q: Does dead vegetation translate automatically to
22 signifying critical area?

23 A: No.

24 Q: Did you look for saline vegetation?

25 A: Yes.



1 Q: Did you see any?

2 A: No.

3 Q: Did you see any sign of periodic inundation such
4 as discoloration of the ground?

5 A: No.

6 Q: Was this area near the high tide that was there
7 the day you went out there on the river's edge?

8 A: Yes, yes.

9 Q: I mean in terms of was the tide in danger or
10 close to inundating in this area?

11 A: No, I -- no, sir.

12 Q: In your estimation, would you have marked this
13 as critical area?

14 A: No.

15 Q: Was this area largely the way it is back in May
16 or June of 2016 when OCRM came out and flagged
17 it and did the last critical line certification?

18 A: I believe so.

19 **MR. WALKER:** Now, let's go to number six. There,
20 wait, you got to go back one.

21 Q: All right. Let's talk about six. Do you agree
22 with Mr. Wood here?

23 A: Yes, I do.

24 Q: Do you think this should be marked critical
25 area?



1 A: Yes, I do.

2 Q: Why?

3 A: There's -- you can see the saltwater in there.

4 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 19:**

5 **MR. WALKER:** Your Honor, at this time, we would move
6 Defendant's Exhibit -- excuse me, Respondent's
7 Exhibit 19 into evidence.

8 **MS. ARMSTRONG:** No objection.

9 **RULING OF THE COURT:**

10 **THE COURT:** It's admitted. Mr. Churdar?

11 **MR. CHURDAR:** No objection, Your Honor.

12 **(Respondent's Exhibit Number 19 was admitted into**
13 **evidence).**

14 Q: You're almost done. Do you use a GPS device in
15 surveying?

16 A: Yes, sir.

17 Q: What kind?

18 A: I use a Trimble Survey Grade GPS.

19 Q: And are you familiar with the accuracy of that
20 device?

21 A: Yes, sir.

22 Q: What is the accuracy of that device?

23 A: Horizontally it's about a quarter inch, three-
24 eighths of an inch.

25 Q: Quarter inch to three-eighths of an inch margin



1 of error?

2 A: Yes.

3 Q: Thank you.

4 **MR. WALKER:** One minute, Your Honor.

5 Q: For purposes of setting a line on a survey,
6 including the critical line or just a boundary
7 line, do you use any other system other than
8 AutoCAD these days for accuracy?

9 A: We do not, no.

10 Q: Do you believe that you practice in accordance
11 with the industry these days given the
12 technology?

13 A: Yes, sir.

14 Q: Thank you.

15 **THE COURT:** Mr. Churdar?

16 **MR. CHURDAR:** I don't have any follow-up for the
17 witness.

18 **THE COURT:** Ms. Armstrong?

19 **MS. ARMSTRONG:** I do have some cross-examination, but
20 it's 1:00. Would it be appropriate to take a
21 break now instead of going till 1:30 or 1:45?

22 **THE COURT:** Well, we've been going to 1:30 some days,
23 but is it going to be 1:30 or 1:45?

24 **MS. ARMSTRONG:** I ---

25 **THE COURT:** Why don't we just take a break. Let's



1 see, come back at 2:00?

2 **MR. WALKER:** Very good.

3 **MS. ARMSTRONG:** Can we make it about 2:15? I just
4 find it really hard to get out somewhere, back
5 in, in less than an hour?

6 **MR. WALKER:** That's fine, Your Honor. We're fine
7 with that.

8 **THE COURT:** 2:15, sold.

9 (A break was taken from 12:59 p.m. until 2:17 p.m.)

10 **COURT REPORTER:** All rise.

11 **THE COURT:** Y'all be seated. Wow, most of the time
12 they don't jump back up on the witness stand.
13 Thank you.

14 **MS. ARMSTRONG:** Okay. Harvin, would you turn us on,
15 please?

16 **THE COURT:** More specific.

17 **MS. ARMSTRONG:** Right, hook our computer up so that
18 we can all see it on the screen.

19 **MS. FAIR:** Oh, you want the computer?

20 **MS. ARMSTRONG:** Yes.

21 **MS. FAIR:** Okay. Your computer and not the -- okay.

22 **MS. ARMSTRONG:** We might be switching back and forth.
23 Your Honor, may I proceed?

24 **THE COURT:** Yes.

25 **MS. ARMSTRONG:** Thank you.



MR. BYRNES - CROSS-EXAMINATION BY MS. ARMSTRONG:

Q: Mr. Byrnes, when was the last time that you personally flagged a critical area line along the river at Captain Sam's Spit?

A: I believe it was 2015.

Q: That was when DHEC staff was out there with you in 2015, so you flagged, you personally flagged the line with DHEC there?

A: No, before -- before DHEC did.

Q: Before DHEC came out, okay. And in 2014, it was Keith Campbell that flagged that line, right?

A: Yes, it could have been.

Q: Do you need to look at the drawings again? Do you want to look at them?

A: I don't think -- I don't know if Keith actually did it personally or if we had a crew do it.

Q: Okay. But you didn't flag the 2014 line?

A: No.

Q: And you didn't flag 2016 line either?

A: No.

Q: And it was the 2015 line where there's some changes that you noticed or your staff noticed between two lines that were both in 2015, you're familiar with that, what I'm talking about, right?



1 A: Yes.

2 Q: There's a pretty big discrepancy that raised
3 some red flags around your office, right?

4 A: Uh-huh.

5 Q: And it's around that time, too, that DHEC
6 noticed some problems and had some concern with
7 the line that was flagged by your staff, right?

8 A: Yes.

9 Q: Was that -- that was actually the line that you
10 flagged because you flagged the one in 2015,
11 right?

12 A: I believe so.

13 Q: And that was after your staff had identified --
14 you all had identified a U-shaped area in the
15 line that had raised some questions, correct?

16 A: Yes. It was ---

17 Q: So DHEC was concerned -- I'm sorry; were you ---

18 A: Yeah, it was -- DHEC reflagged the line. That
19 was after the rain event we had in October of
20 2015. There were several areas that were, I'm
21 going to call them gullies, that were washed out
22 because of the rain.

23 Q: In 2015, DHEC was concerned with the accuracy of
24 the line that you had flagged, right?

25 A: Yes, because we -- I had flagged it before the



1 rain event in early October that year.

2 Q: And they went out and they reflagged over your
3 work, right?

4 A: Yes.

5 Q: And they were so concerned with it that they
6 actually asked you for the DWG or CAD file,
7 right?

8 A: Yes, ma'am.

9 Q: And they've never done that before, though?

10 A: That's correct.

11 Q: So this was actually -- it was a pretty unique
12 situation that we had here, right?

13 A: Yes, ma'am.

14 Q: Because -- and you said DHEC hasn't always
15 signed off on your lines either, isn't that
16 correct?

17 A: On occasion they haven't, yes.

18 Q: And this was one of those occasions?

19 A: Yes, ma'am.

20 Q: How often do we experience a spring high tide or
21 king tide?

22 A: Several times a year.

23 Q: DHEC's never told you that you cannot consider
24 spring tide areas as critical habitat, have
25 they?



1 A: Have they told me I cannot?

2 Q: Yes.

3 A: No.

4 Q: Okay. So you could if you felt like that was
5 critical area, you could certainly flag it,
6 couldn't you?

7 A: Yes.

8 Q: And you use -- you use the toe of the escarpment
9 in setting the critical area line when you set
10 it, didn't you?

11 A: In this case, yes, ma'am.

12 Q: And that's your understanding of where the
13 critical line is located here on Captain Sam's
14 Spit, isn't it?

15 A: Yes, yes.

16 Q: And those photographs that we were looking at,
17 and I'm going to get into them in a little bit
18 more detail, but while we're talking about the
19 toe of the escarpment, the toe of the escarpment
20 was not visible in any of those photographs that
21 we were looking at in Exhibit Number 20, was it?
22 I can hand you -- actually, it's Exhibit Number
23 19.

24 A: You can see it -- can see it in this photo
25 (indicating).



1 Q: And this is the photo referring to point number
2 three?

3 A: Yes, ma'am.

4 Q: Are you talking about the top photo in that
5 image?

6 A: Yes, ma'am. The escarpment is -- the toe of the
7 escarpment of shown in the bottom photo there
8 (indicating).

9 Q: And this is ---

10 A: That's not one of the six areas.

11 Q: That's not an area that you looked at, but
12 that's an area where the toe ---

13 A: No, it's not. That's right.

14 Q: And so did you take all of these pictures on the
15 same day? Was this all done at the same time?

16 A: They were all done at the same time. I didn't
17 take them. Mark Lamar took the pictures.

18 Q: So you could see the toe the escarpment in at
19 least two of those pictures?

20 A: Yes.

21 Q: But the high tide comes to the top of the
22 escarpment, isn't that correct?

23 A: I don't believe so, no, ma'am.

24 Q: It doesn't? What causes the escarpment to be
25 eroded away at the top, then? Doesn't wave



1 action -- doesn't waves have to be hitting the
2 escarpment to cause ---

3 A: Well, the escarpment is pretty much vertical,
4 once a little bit at the bottom goes, the top's
5 going to go.

6 Q: Looking at ---

7 **THE COURT:** It's upside down.

8 Q: Can you see the green line on this drawing, Mr.
9 Byrnes?

10 A: Yes, ma'am.

11 Q: That indicates that it's the DHEC critical line.
12 Let me see if we can get up a little closer.

13 **MR. WALKER:** May we have a point of reference? Is
14 this in evidence?

15 **MS. ARMSTRONG:** It's produced by KDP, the -- KDP II-
16 RP (3005781).

17 Q: Do you see, Mr. Byrnes, on this drawing on the
18 left side where there's writing that says OCRM
19 critical line 5/9/15 and it's in green?

20 A: Yes, ma'am.

21 Q: When I look at that drawing, compared to your
22 critical line in Exhibit -- KDP Exhibit 42, the
23 2015 line, can you tell me why those two lines
24 are different? And specifically, would you look
25 with me, the area I had in question was right



1 along here (indicating). Do you see that ---

2 A: Yes, ma'am.

3 Q: --- little dip in where that green line is?

4 A: Uh-huh.

5 Q: Why is that line not shown on the Exhibit Number
6 42 show in your 2015 line?

7 A: I don't know.

8 Q: Looks like it was eliminated, though, right,
9 that little dip in is not shown in the Exhibit
10 Number 42 with your 2015 line, correct?

11 A: It's not shown, that's correct.

12 Q: But that does say that it's the DHEC line,
13 correct?

14 A: It does, but my company didn't produce this
15 drawing.

16 Q: Do you know where that information would have
17 come from?

18 A: I do not. It looks like an engineering drawing
19 is what it looks like.

20 Q: Do you work with the engineers out at Thomas and
21 Hutton?

22 A: We work in conjunction on projects, but I do not
23 -- we're two separate companies.

24 Q: Sure, but do you communicate -- have you
25 communicated ---



1 A: Yes.

2 Q: --- information back and forth with Thomas
3 Hutton with respect to this project?

4 A: Yes, ma'am.

5 Q: And for some reason, Thomas and Hutton doesn't
6 have your -- did you provide your survey
7 information to Thomas and Hutton?

8 A: Yes, ma'am.

9 Q: But for some reason they just didn't use that
10 information when they prepared these drawings?

11 A: Yes, ma'am.

12 **MS. ARMSTRONG:** Harvin, can we switch to the other
13 system now, please?

14 **(Respondent's Exhibit Number 19 was introduced into**
15 **the record at this time.)**

16 Q: We were talking about Exhibit Number 19, Mr.
17 Byrnes, how were you able to find where this
18 blue line was located?

19 A: I navigated with an aerial photograph off of
20 Google.

21 Q: Oh, because the flags weren't -- the flags
22 weren't actually in the ground from where this
23 blue line was certified, were they?

24 A: Yes, they were.

25 Q: There were pink flags?



1 A: There were pink pin flags.

2 Q: And you saw them with regularity along where the

3 ---

4 A: Yes, ma'am.

5 Q: --- the shoreline is -- you saw ---

6 A: I didn't -- I didn't check along the escarpment
7 the whole way, but where each of these one
8 through six areas were, I checked there.

9 Q: But you didn't take any photographs and in none
10 of these photographs are any pink flags that
11 indicate where this blue line was located,
12 correct?

13 A: I'd have to look at the photographs to see if
14 there were any.

15 Q: Well, we're going to look at them one by one.
16 Do you see any pink flags in this photograph?

17 A: No, ma'am.

18 Q: And you didn't have the survey data either that
19 was used in preparing this blue line, did you?

20 A: No.

21 Q: So we'll go through them one by one and make
22 sure we solve this question of the pink flags.
23 Were there any pink flags in the second page of
24 Exhibit Number 19?

25 A: I would say no.



- 1 Q: Do you see any pink flags in this photograph,
2 the third photograph of Exhibit 19?
- 3 A: I think I do see one, yes, ma'am.
- 4 Q: Okay. Where is that located?
- 5 A: Right there (indicating).
- 6 Q: Okay. So you see one right there. The third
7 page. On the fourth page, do you see any pink
8 flags?
- 9 A: No, ma'am.
- 10 Q: On the fifth pag, do you see any pink flags?
- 11 A: No, ma'am.
- 12 Q: On the sixth page of Exhibit 19, do you see any
13 pink flag?
- 14 A: No, ma'am.
- 15 Q: Any pink flags on the seventh page of Exhibit
16 19?
- 17 A: No, ma'am, not that I can make out.
- 18 Q: Those aren't -- these other markers aren't
19 anything -- those aren't flagging that you use
20 as critical line survey, are they?
- 21 A: No, ma'am, that's not a pin flag.
- 22 Q: Okay. This is the eighth image, do you see a
23 pink flag there?
- 24 A: Yes, ma'am.
- 25 Q: Where is that?



1 A: (Indicating).

2 Q: Okay. In the ninth image, do you see any pink
3 flags there?

4 A: No, ma'am.

5 Q: We're at ten, the tenth page of Exhibit 19, do
6 you see any there?

7 A: Yes, ma'am.

8 Q: And there. Here's the eleventh page, do you see
9 any pink flags there?

10 A: No, ma'am.

11 Q: Here's the last image. Do you see any pink
12 flags there?

13 A: Yes, ma'am.

14 Q: Where is that?

15 A: Right there (indicating).

16 Q: Would that be a -- well ---

17 A: Yes, ma'am.

18 Q: Is that -- that looks like it might be one to
19 me, okay.

20 A: Yeah.

21 Q: Okay.

22 A: If you put it back up, I'll ---

23 Q: Oh, I'm sorry.

24 A: That's all right.

25 Q: Sure. What's that?



1 A: I believe that may be the same flag right there,
2 just in a different photograph (indicating).

3 Q: Okay. Just taken maybe from different --
4 different ---

5 A: Different angles, yes, ma'am.

6 Q: Okay. May we start -- did you indicate that
7 this -- you agreed with ---

8 A: Number six?

9 Q: --- the line here? You don't believe that
10 that's critical area where the pink flag is?

11 A: At number six, I believe it is correct.

12 Q: But this is -- okay. And this is number six,
13 right?

14 A: Yes, ma'am.

15 Q: So you agree that that's critical area?

16 A: Yes.

17 Q: Now, we're looking at where area number five is.
18 What kind of vegetation are we seeing in the
19 image, the grayish kind of colored vegetation?

20 A: I believe they're wax myrtle.

21 Q: Do those look like they're dead to you?

22 A: For the most part, yes, ma'am.

23 Q: Do you know what causes wax myrtles to die?

24 A: No, ma'am.

25 Q: So you don't know whether salt, saltwater would



1 cause a wax myrtle to die?

2 A: No, ma'am.

3 Q: Looking at this image, also from -- taken from
4 number five, it's Bates labeled number 32. What
5 kind of vegetation do you see in the top photo
6 on the right?

7 A: There's a palm tree or maybe several small palm
8 trees. I can't discern what the other
9 vegetation is.

10 Q: You were on-site when you said this picture was
11 taken, right?

12 A: Yes, ma'am.

13 Q: Can you tell what any of the vegetation is aside
14 from the palm trees in either of these pictures?

15 A: No, ma'am.

16 Q: So you're not able to tell if that's saltwater
17 vegetation or not, are you?

18 A: It didn't appear to be saline vegetation when I
19 was out there, but I don't know what it is. I
20 mean, I don't know, you know.

21 Q: You recognize there are multiple different kinds
22 of salt -- saline or saltwater vegetation,
23 right?

24 A: Yes, ma'am.

25 Q: And salt -- spartina alterniflora, or that marsh



1 grass is what we normally see, that's the low
2 marsh vegetation, right?

3 A: Right.

4 Q: And there are other kinds of vegetation, aren't
5 there?

6 A: Yes, ma'am.

7 Q: Do you know what the names of any of those are?

8 A: No, ma'am.

9 Q: You don't know the name of any other salt marsh
10 vegetation?

11 A: Bulrush.

12 Q: Are you talking about black needlerush?

13 A: Yes.

14 Q: That's the only other one you can think of?

15 A: Yes, ma'am.

16 Q: And here's another image at five, site five,
17 that you've got labeled. It's Bates labeled 31.
18 What kind vegetation do we see in these images?

19 A: In the top image, that looks like a cedar tree
20 right there.

21 Q: Right -- I'm sorry, right where?

22 A: Right here (indicating).

23 Q: Oh, you see, right.

24 A: In the foreground. I don't ---

25 Q: That was right in front of it towards the water



1 where it appears that you're indicating is part
2 of this area here?

3 A: I believe it would be closer back here
4 (indicating).

5 Q: Oh, okay. So what we were looking at is back --
6 is back a ways from this (indicating)?

7 A: Yes, ma'am.

8 Q: Okay. So are you able to see any of what's in
9 that little dip area?

10 A: It appears to be dead wax myrtles.

11 Q: Appears to be dead wax myrtle.

12 Q: Appears to be dead wax myrtle, okay. Here's
13 another image, two photographs associated with
14 point five in Exhibit 19. I think this is Bates
15 labeled 30. Are you able to identify the
16 vegetation in these images?

17 A: There's some more dead wax myrtles in there.

18 Q: Any other vegetation that you can identify?

19 A: No, ma'am.

20 Q: Here's also some images for number five,
21 associated with number five, Bates labeled 29.
22 What kind of vegetation is present here?

23 A: I believe they're wax myrtles on the bottom
24 picture to the left and there is a -- I believe
25 that's an oak tree.



1 Q: Do you see a rack line? Do you know what a rack
2 line is?

3 A: No, ma'am.

4 Q: You don't know what a rack line is?

5 A: No, ma'am.

6 Q: Okay. Do you know what this is down here at the
7 bottom of the picture, that kind of grayish,
8 brownish looking stuff?

9 A: It's dead marsh grass.

10 Q: So you didn't see a pink flag in that photo.

11 **THE COURT:** You said there was a pink flag in that
12 last photo?

13 **MS. ARMSTRONG:** I said we didn't see a pink flag in
14 that photo. I wanted to make sure I didn't ---

15 **THE COURT:** Okay.

16 **MS. ARMSTRONG:** I guess I could ask the witness to
17 confirm.

18 Q: There wasn't a pink flag in these photos, right,
19 or was there?

20 A: That could possibly be one right there
21 (indicating).

22 Q: Okay.

23 A: It's that there, too (indicating).

24 Q: And that's shown in that -- what you call the
25 dead marsh grass?



1 A: Yes, ma'am.

2 Q: Do you know how dead marsh grass would get
3 pushed up into that area?

4 A: No, ma'am.

5 Q: Is it possible that the tides, water, would push
6 that marsh grass up into that area?

7 A: It's possible.

8 Q: Can you think of any other way that marsh grass
9 would have gotten pushed up into that area?

10 A: No, ma'am.

11 Q: We may have been referring to the wrong points,
12 I was looking at the arrows so much. Yeah,
13 looking at an area that you're showing as
14 photographs corresponding to point four on this
15 map ---

16 A: Uh-huh.

17 Q: --- and it's Bates labeled 28. Is this one of
18 the ones -- I didn't see any pink flags here.
19 Do you see any?

20 A: No, ma'am.

21 Q: What kind of vegetation is this? What -- what
22 are you looking at?

23 A: I'm not sure what that is.

24 Q: You were on site when these were taken?

25 A: Yes, ma'am.



1 Q: So you're not able to say whether you observed
2 -- well, strike that. I'll move on to the next
3 one. Here's two more images taken at point
4 four, Bates labeled number 27. This isn't the
5 one that you had identified as having any pink
6 flags. Can you tell me what kind of vegetation
7 we're seeing here?

8 A: There's some sea oats in the top picture and
9 then right in the middle of the top picture, I
10 believe that's a cedar tree.

11 Q: Can you mark with your finger where you see ---

12 A: The cedar tree is right there (indicating).

13 Q: And you, again, you didn't have any survey data
14 and there weren't any pink flags here, so you
15 didn't have any way to verify that you were
16 actually in the spot that was surveyed in 2017,
17 correct?

18 A: There were pink flags there. You just can't see
19 them in the photograph. These flags are only --
20 pin flags are twelve inches, so when they put
21 them in the ground, they're eight inches from
22 the ground. They can be hidden with the
23 vegetation.

24 Q: How were you able to locate the flags that were
25 in the ground and correlate them to the blue



1 line here?

2 A: I used an aerial photo off of Google, which
3 there's very little -- there's very few trees
4 out here and you can -- a clump of wax myrtles
5 will show up on that -- or a palm tree will show
6 up. I was able to navigate myself to find it
7 that way.

8 Q: And you recognize that there is some margin of
9 error with Google Earth images, don't you?

10 A: Yes, ma'am.

11 Q: I mean, you certainly wouldn't use it as a
12 surveyor to try to locate a point on the ground,
13 would you?

14 A: No, ma'am.

15 Q: This is two photos correlated at point 3 and
16 it's Bates labeled 26. This is one of the
17 photographs that you indicated where you could
18 see an escarpment, is that ---

19 A: Yes, ma'am in the top photo.

20 Q: Can you point us to where the escarpment is?

21 A: (Witness complies.)

22 Q: Do you know how high the escarpment -- how high
23 the escarpment was at that point?

24 A: Up by the tree that is falling into the river,
25 it was probably six feet down to about a foot at



1 the bottom of the photo.

2 Q: So from the toe of the escarpment to the top of
3 the escarpment, about how high was that?

4 A: About a foot at the bottom of the photo.

5 Q: Only a foot, okay. And what kind of vegetation
6 -- do you see any pink -- are there any pink
7 flags here?

8 A: I can't pick out any in the photo, no.

9 Q: Can you describe what kind of vegetation you're
10 seeing in this photo?

11 A: Well, I believe the tree that it's -- that's a
12 cedar tree.

13 Q: Sure.

14 A: That's falling into the water there.

15 Q: And what about other plants?

16 A: I can't identify any, no, ma'am.

17 **THE COURT:** Might not have been a pink flag, but
18 there's a long pink line in there.

19 **MS. ARMSTRONG:** That he drew.

20 **THE COURT:** Yes.

21 Q: And we're looking now at -- let's see, it's
22 Bates labeled 25 and it's two photos that
23 correspond to point two. You were up here also,
24 right?

25 A: Yes, ma'am.



1 Q: And I see that this is one of the photos where
2 you marked a pink flag, do you see that flag?

3 A: Yes, ma'am.

4 Q: And what kind of vegetation is that around that
5 pink flag?

6 A: I believe it's sweet grass.

7 Q: Sweet grass?

8 A: Sweet grass.

9 Q: And in the bottom image, what kind of vegetation
10 are we seeing there?

11 A: That's sweet grass.

12 **THE COURT:** How deep is the escarpment there?

13 A: I would say it was several feet, a couple feet.
14 It -- at the -- on the bottom picture, it goes
15 up at the top of the picture, it's higher. And
16 it comes down to a couple of feet.

17 **THE COURT:** So right on the bottom picture at the
18 bottom left is a couple of feet?

19 A: Yes, ma'am. Yes, sir.

20 Q: And you agree that the escarpment, the height of
21 the escarpment varies along the entire neck of
22 the spit, doesn't it?

23 A: Yes, ma'am.

24 Q: So there are some points that are lower and some
25 points that are higher, right?



1 A: Yes, ma'am.

2 Q: Obviously, it's easier for water to get in if
3 it's a lower point in the escarpment?

4 A: Yes, ma'am.

5 Q: And Exhibit Number One or point number one in
6 the photographs associated with that on Bates
7 labeled 24, do you know what kind of vegetation
8 we're looking at here?

9 A: I believe you still -- again, you're seeing some
10 sweet grass in there.

11 Q: And your survey that you did in 2015, you show
12 a little dip in the -- the blue line kind of
13 follows that dip, except it goes a little
14 further inland, doesn't it?

15 A: Yes.

16 Q: Talking about right here, you've got a little --
17 little dip ---

18 A: Uh-huh.

19 Q: --- in your red line, right, and that would
20 indicate that some water's getting in there,
21 right?

22 A: Yes, ma'am.

23 Q: Could you mark it for the Judge, the area we're
24 talking about?

25 **THE COURT:** Oh, you were marking there.



1 A: (Witness complies.)

2 Q: And here's another image, front page of Exhibit
3 Number 19, two photographs that correspond to
4 that point one that we were just talking about.
5 Aside from that dead tree, are you able to
6 identify any of the vegetation?

7 A: I believe the brown clumps that you see are
8 sweet grass.

9 Q: Are you talking about here (indicating)?

10 A: I'm talking about here and here and here
11 (indicating).

12 Q: Do you know what kind of vegetation is right in
13 here (indicating)?

14 A: No, ma'am.

15 Q: But you do see that there's a little dip in that
16 sort of follows your line and then goes further,
17 right?

18 A: Yes, ma'am.

19 Q: And this is an erosional area, you acknowledge
20 that, don't you?

21 A: Yes, ma'am.

22 Q: So between 2016 and when your line in red was
23 drawn in 2017, you expect some additional
24 erosion to have occurred, wouldn't you?

25 A: Yes, ma'am.



1 Q: But you actually haven't gone out and surveyed
2 it again since 2016, have you?

3 A: That's correct.

4 **MS. ARMSTRONG:** Your Honor, can you bear with me for
5 just a moment. I think I'm pretty close to
6 being done. I don't have any other questions
7 for this witness.

8 **THE COURT:** Re-direct?

9 **MR. BYRNES - RE-DIRECT EXAMINATION BY MR. WALKER:**

10 **(Respondent's Exhibit Number 19 was introduced into**
11 **the record at this time.)**

12 **MR. WALKER:** Could we go to page one of Exhibit 19,
13 please? That would be KDP 023. And if you'd
14 switch -- if you would go -- could you highlight
15 the upper picture, please, Dave?

16 Q: All right. Now that we've highlighted, do you
17 see a pink flag in that photo?

18 A: Yes, ma'am -- yes, sir. Sorry.

19 Q: Oh, that's okay. Where is it?

20 A: (Witness indicates.) Right there.

21 **MR. WALKER:** All right. Now, let's go to the bottom
22 photo. If you could draw it up just like we did
23 the last one.

24 Q: All right, do you see pink flags here?

25 A: Yes, sir. Here and here (indicating).



1 Q: All right. Is there any doubt in your mind that
2 there were pink flags?

3 A: No.

4 Q: Based on your knowledge of the topography out
5 there and what you were given as far as
6 locations in Google Earth, did you believe that
7 you had identified the six locations?

8 A: Yes.

9 **MS. ARMSTRONG:** Objection, Your Honor, this is not --
10 this is not going to new material. This isn't
11 new material. We've already -- he's already
12 testified extensively about the line, how he did
13 it, what he did, and we went through all of
14 these photographs with Mr. Walker.

15 **MR. WALKER:** Well, I'll move on. Happy to move on to
16 number -- if you would please go to number KDP
17 29 in the upper left.

18 Q: All right. This relates to location five and
19 the first thing I'm going to ask you is did the
20 critical line in 2015 or is it '16 that's in
21 red, did it show a little indentation, a little
22 V into the area?

23 A: Yes, sir.

24 Q: Could you circle where that is?

25 A: (Witness does as requested.)



1 Q: Now, if we go over to the photographs where
2 those three pipes, are they -- are they in the
3 same configuration?

4 A: Yes, sir.

5 **MS. ARMSTRONG:** Objection, Your Honor, he's leading -
6 - he's leading the witness.

7 **MR. WALKER:** All right.

8 **THE COURT:** Well ---

9 **MR. WALKER:** All right. I'll ask the question in a
10 different way.

11 Q: Can you tell us where those three pipes are in
12 relation to the red delineation of the critical
13 line?

14 A: They're right where I circled.

15 Q: Okay. To your knowledge, have you always
16 submitted to OCRM the line that they approved?

17 **MS. ARMSTRONG:** Objection, Your Honor. Again, this
18 is not relevant to re-direct. I mean, this is
19 not relevant to the questions that I was asking
20 on cross. It's not new material. We've already
21 talked about submitting lines to OCRM and that
22 whole process was addressed on direct.

23 **MR. WALKER:** The petitioner put up a photograph of a
24 drawing that was not done by this witness that
25 showed an impingement into the land that was not



1 shown according to the witness, on his certified
2 critical line. And I'm trying to develop that
3 he has always submitted what OCRM approved.

4 **MS. ARMSTRONG:** That's not his testimony at all. He
5 didn't say that OCRM's always approved what he's
6 submitted. In fact, that's not -- in fact,
7 that's exactly what did not come out from this
8 witness' testimony. He said that OCRM went back
9 out and reflagged the line that he submitted, so
10 I think that's first of all a
11 mischaracterization of the testimony.

12 **MR. WALKER:** Well, I meant it to be that he --
13 whenever OCRM's come back out there and
14 reflagged it, he has taken those metes and
15 bounds and that's what he has submitted.

16 **THE COURT:** Well, I'll allow you to ask that.

17 **MS. ARMSTRONG:** And I'm not sure that that goes to
18 anything that -- that's not new material.

19 **THE COURT:** It's responsive of the new material that
20 you raised.

21 **Q:** In those instances, in 2015 and 2016, where OCRM
22 came out and checked the flagging and reflagged
23 in some instances, did the final coordinates
24 that you picked up, metes and bounds reflect
25 those flaggings by OCRM?



1 A: Yes.

2 Q: Thank you.

3 **THE COURT:** You may step down.

4 A: Thank you.

5 **(The witness was excused.)**

6 **MR. WALKER:** KDP II and KRA Development, LLP, calls
7 Ray Pantlik.

8 **COURT REPORTER:** I think I've seen your last name
9 somewhere, but can you spell it for me, please?

10 **MR. PANTLIK:** P-A-N-T-L-I-K.

11 **COURT REPORTER:** Have a seat. Raise your right hand,
12 please. Do you solemnly swear the testimony
13 you're about to give in this matter is the
14 truth, the whole truth, and nothing but the
15 truth, so help you God?

16 **MR. PANTLIK:** Yes.

17 **COURT REPORTER:** Thank you.

18 **MR. PANTLIK - DIRECT EXAMINATION BY MR. WALKER:**

19 Q: Ray, where do you work?

20 A: I work at Kiawah Island for the Kiawah
21 Development Partners.

22 Q: What's your position there?

23 A: Director of Development.

24 Q: How long have you worked for the developer of
25 Kiawah Island?



1 A: Almost 28 years.

2 Q: What position did you start with?

3 A: Director of Development.

4 Q: All right. We're going to get into those
5 responsibilities very soon. But before we get
6 there, would you tell The Court where you went
7 to school?

8 A: I went to college at the University of Tennessee
9 and have a bachelor of science in civil
10 engineering.

11 Q: Are you licensed in the State of South Carolina?

12 A: I am.

13 Q: Is that license current?

14 A: Yes.

15 Q: Now, let's turn to our responsibilities as
16 Development Director. What do you do for Kiawah
17 Partners as the man in charge of -- or as
18 Development Director?

19 A: Well, I primarily procure services from our
20 engineers and surveyors that are -- I lead them
21 to make certain applications be it at the local
22 government, state government, or federal
23 government for the necessary permits that we
24 need in the course of our development projects.

25 Q: So in a typical development that abuts the



1 critical line, what permits are we talking about
2 and from whom?

3 A: Well, we always need some form of plat approval
4 from the town government, and we would pretty
5 much always need at least a stormwater permit
6 from DHEC, a Coastal Zone Consistency from DHEC,
7 and water and sewer permits from DHEC.

8 Q: Now, what role do you have overall in the
9 various subdivisions that are created over time
10 at Kiawah?

11 A: Well, in addition to organizing the permits for
12 each of the developments, I oversee the
13 construction contract planning.

14 Q: Have you been involved in the assessment and
15 development of Captain Sam's Spit?

16 A: Yes.

17 Q: What has been your role with regard to what may
18 happen on the spit?

19 A: Well, similar to all of our other subdivisions,
20 we start with a -- usually a Town of Kiawah
21 Island preliminary plat approval and then we
22 proceed into obtaining the state permits.

23 Q: Was there an event that occurred during your
24 tenure with Kiawah Partners that made that
25 property developable?



1 A: Yes, back in 1999, the State OCRM adjusted the
2 base line and setback line to extend it
3 substantially down the peninsula of the spit.

4 Q: All right. Now, what I'd like to do even though
5 we've been here and we all know about Captain
6 Sam's Spit, I'm going to show you an aerial
7 that's been admitted into evidence.

8 MR. WALKER: Could we have Respondent's Exhibit 35,
9 please?

10 (Respondent's Exhibit Number 35 was introduced into
11 the record at this time.)

12 Q: What is this area? What does this show?

13 A: Well, it shows the aerial image of the spit,
14 certainly in what looks to be in 2013, but I say
15 that because it was before the channel was cut
16 through there. It also shows the road right-of-
17 way that was designed that's the subject of the
18 permits, and it shows the 50 residential lots
19 that are part of the Town's preliminary plat
20 approval. And there's also one community dock
21 site that is laid out on this drawing.

22 Q: Would you point out where Beachwalker Park is,
23 if you could mark that in some way?

24 A: Yeah, the parking area is generally here. They
25 have some restrooms and other facilities right



1 in here and then they have a beach boardwalk
2 that leads to the beach approximately there
3 (indicating).

4 Q: Let me ask you about that wooded parcel that's
5 just to the east.

6 A: Yes.

7 Q: Is that going to remain wooded?

8 A: No, as a matter of fact, a later aerial image
9 would show the development of a condominium
10 project in this area and we've extended a road
11 up from approximately here southward and then
12 eastward to almost connect to the Duneside Road
13 on the other side (indicating).

14 Q: Based on your many years at Kiawah and your
15 awareness of the development, does this map, to
16 the best of your knowledge, accurately reflect
17 the location of residential development on the
18 west side of the island?

19 A: Yes.

20 Q: Let's go across the marsh from looking north
21 from Captain Sam's toward the mainland. What do
22 we see? What's on the -- what I'd call the
23 north of Captain Sam's Spit?

24 A: Well, strictly speaking, north is that direction
25 (indicating).



1 Q: Right.

2 A: So ---

3 Q: Northwest.

4 A: --- the northwest you see generally a related
5 development by Kiawah Partners called the
6 Cassique area, subdivision, neighborhood.

7 Q: Could you do a little circle where Cassique is?

8 A: (Witness complies.)

9 Q: All right. And anything else to the northwest
10 that you see there?

11 A: Well, there's this peninsula that's at the
12 eastern most part of Seabrook Island community,
13 it's called Marshgate Road.

14 Q: All right. Thank you, that's all I have on
15 that. Now, before we get into specifics of the
16 permitting with Captain Sam's, I want to talk
17 about any entitlements that Kiawah Partners has
18 with the Town of Kiawah Island. Is there a
19 specific agreement that embodies certain
20 entitlements?

21 A: Yes, there's an agreement that was last revised
22 in December of 2013 that encompassed all of the
23 remaining undeveloped land, including Captain
24 Sam's.

25 Q: Was Captain Sam's treated any differently? I'm



1 not talking about specifics, but was Captain
2 Sam's treated any differently from other land on
3 the island?

4 A: It was. There are special obligations we have
5 that's listed in the Development Agreement and
6 there are unique development standards in the
7 Development Agreement that are specific to the
8 parcel that Captain Sam's is on.

9 Q: Now, I'd ask you, there's a big ole notebook to
10 your right up there and, if you would, please go
11 to KDP Exhibit 4. It's a little confusing
12 because the first eight exhibits are joint
13 exhibits. So after those eight exhibits, go to
14 Exhibit 4.

15 **(Respondent's Exhibit Number 4 was introduced into the**
16 **record at this time.)**

17 A: All right, I'm here, I'm there.

18 Q: Can you identify that?

19 A: Yes, this is the latest version of the
20 Development Agreement between Kiawah Resort
21 Associates and the Town of Kiawah Island.

22 Q: Now, you mentioned that there's some specific
23 provisions that deal with Captain Sam's Spit.
24 Would you direct us to those?

25 A: In the vicinity of page -- actually, on page 23



1 ---

2 **MS. ARMSTRONG:** Your Honor, I'm going to object since
3 he -- sounds like the witness is about ready to
4 enter some hearsay into evidence by reading
5 portions of this document.

6 **THE COURT:** Well, we haven't gotten there yet.

7 **MS. ARMSTRONG:** Okay.

8 **Q:** Well, I'd like you to spend a minute and look
9 through it and let me know if that is a true and
10 accurate copy of the Development Agreement?

11 **A:** To the best of my knowledge and belief, yes.

12 **Q:** Okay. And are there two exhibits that have been
13 selected that are attached at the back?

14 **A:** Yes. Exhibit 13-2 and Exhibit 16.2.

15 **Q:** Is that Development Agreement, to the best of
16 your knowledge, in effect between Kiawah
17 Partners and the Town of Kiawah Island?

18 **A:** Yes.

19 **MOTION TO ADMIT RESPONDENT'S EXHIBIT 4:**

20 **MR. WALKER:** Your Honor, we would move to enter the
21 Development Agreement into evidence.

22 **MS. ARMSTRONG:** Objection, Your Honor, on multiple
23 grounds. Of course, the document's hearsay. I
24 don't think -- there hasn't been any foundation
25 for how Mr. Pantlik can authenticate it. He's



1 not a signator to this; he didn't draft it; he's
2 not the Town of Kiawah; he doesn't keep this in
3 the normal course of business; and this isn't a
4 -- this is a -- it's filled with hearsay. I
5 don't think he can authenticate it and I also
6 don't even -- I believe it's not relevant, the
7 entire Development Agreement, to this
8 proceeding.

9 **THE COURT:** Mr. Walker?

10 **MR. WALKER:** Well, we can spend some more time laying
11 a foundation.

12 **Q:** Are you familiar with this Agreement?

13 **A:** I am.

14 **Q:** Do you refer to it on a frequent basis?

15 **A:** I do.

16 **Q:** Do you consult it for specifics about parcel
17 development standards and things like that?

18 **A:** It is essential, yes.

19 **Q:** Do you understand that it sets forth development
20 rights of the developer?

21 **A:** I do.

22 **MR. WALKER:** Your Honor, we believe that there's a
23 foundation -- first, that he's familiar with it.
24 I don't think there's any question that he's
25 authenticated it. He refers to it all the time.



1 It's a contract that expresses the rights of the
2 developer, the relationship between the town and
3 the developer. We think it's highly pertinent.
4 It influences -- there's specific provisions
5 that have to do with the development methods on
6 Captain Sam's that ---

7 **THE COURT:** Well, are the development methods on
8 Captain Sam's challenged in this case?

9 **MS. ARMSTRONG:** No.

10 **MR. WALKER:** Are they challenged? Yes, they are.
11 They're saying they're not environmentally
12 sensitive, that they should not be allowed to do
13 what they're doing. They're saying there should
14 be no development on Captain Sam's, so we think
15 just ---

16 **THE COURT:** Is that -- well, is that correct? Are
17 you saying ---

18 **MS. ARMSTRONG:** So, I think let's back up a little
19 bit. It's not the development methods. It's
20 whether development is appropriate in an unsafe
21 -- unstable and dynamic area like Captain Sam's.
22 That's what is at issue, not actually -- now how
23 they're going to do the development. I think
24 the testimony from Dr. Young last week, he
25 clearly laid out the points. It doesn't -- you



1 can build structures that are environmentally
2 friendly, but you can still build them in a
3 place that's dynamic and unsafe. And that's
4 what the issue is here. And I ---

5 **THE COURT:** So, can I stop you so I can ---

6 **MS. ARMSTRONG:** Uh-huh.

7 **THE COURT:** --- so what you're challenging is that
8 there should be no development whatsoever, but
9 you're not challenging how the development ---

10 **MS. ARMSTRONG:** The methods, correct. The methods.

11 **THE COURT:** --- the methods of development.

12 **MS. ARMSTRONG:** No, and I also -- on that point,
13 certainly, there's already evidence in the
14 permit itself and the certification decision,
15 Mr. Pantlik I'm sure can testify about what
16 kinds of things that they're going to do. We
17 don't contest any of those things that they're
18 going to do. I'm fine with that evidence coming
19 in, but that doesn't mean that the Development
20 Agreement itself comes in. I mean, the fact
21 that you're familiar with a document and you
22 look at it and you consult with it doesn't get
23 you around the hearsay rule and that doesn't
24 authenticate something too, as you're, The
25 Court, I'm sure, is aware. I mean, a lot of us



1 consult with documents on a regular basis, but
2 that doesn't get you around the hearsay rule,
3 nor authentication requirements.

4 **THE COURT:** All right. She's set forth -- well, you
5 heard what she set forth, so.

6 **MR. WALKER:** The petitioner has challenged compliance
7 with the CZMP. The CZMP has very detailed
8 standards that deal with barrier islands, that
9 deal with dunes, that deal with open spaces,
10 that they've called into question in their case.
11 We are responding to that to show that
12 environmentally sensitive development techniques
13 will be used. Part of the certification
14 requires that LID, Low Impact Development, be
15 used and we're entitled to show that we're not
16 in any way going to abandon our right to prove
17 that we're in compliance with the CZMP. And
18 maybe for purposes of this exhibit that the
19 petitioner has said that oh, it's okay with the
20 techniques you used, but we view that we need to
21 demonstrate to you that what we're doing is
22 environmentally sensitive because it's much more
23 than just ...

24 **THE COURT:** Why can't he just -- like Ms. Armstrong
25 said, he could testify to that, why do we need



1 -- because soon -- I would let this in along the
2 path that I was thinking that we were going to
3 go, not for the truth of the matter asserted,
4 but just as to the -- as to a development
5 agreement between Kiawah Resort and Associates,
6 but you're going to want it in for the truth of
7 the matter asserted and he could testify to
8 these facts.

9 **MR. WALKER:** Well, we want to show that there is an
10 agreement between the Town and the property
11 owner, number one.

12 **THE COURT:** Okay. Well, he's testified to that.

13 **MR. WALKER:** And we're not putting it in there to say
14 -- and I don't know what statements that are
15 being talked about, but it's a contractual
16 provision. Under that theory, you couldn't get
17 an insurance contract, you could never get a
18 contract in ---

19 **THE COURT:** Yeah, yeah.

20 **MR. WALKER:** --- it's a contract. It's not an out-
21 of-court statement. It's a contract. And if
22 this were a statement by somebody that had been
23 written out and we went to put it in a report,
24 that would be one thing, but this is an
25 agreement of record in the records office and we



1 would bring that out, too. That it's in the
2 records office and we don't think if it's
3 recorded in the records office that that makes
4 it hearsay. We think it would be an exception
5 to the hearsay rule. We think it's pertinent to
6 the development methods; we think it's pertinent
7 to our vested rights that are in play here; we
8 think that the -- that the exhibit showing
9 Captain Sam's is important in terms of the
10 acreage and the commitment to put the
11 conservation easement on it, the parking for
12 Kiawah Island Community Association. This is
13 the source document. We're entitled to put it
14 in evidence.

15 **THE COURT:** Well, I have -- there's nothing in the
16 record to indicate that it's -- it's been filed
17 in the Office of Mesne and Conveyances. Was
18 this witness part of the original drafting and
19 agreement of this agreement?

20 **MR. WALKER:** This witness had involvement. Did he
21 draft it? It was drafted ---

22 **THE COURT:** Well, was he involved was what I said.

23 **MR. WALKER:** His input was sought, yes.

24 **THE COURT:** Well ---

25 **MR. WALKER:** Is that in the record? I don't remember



1 whether he testified to that or not.

2 Q: Is this the first Development Agreement between
3 the Town and the property owner?

4 A: No, the first one was made in 1996 and there was
5 another revision, I can't remember, but I was
6 involved in input, as you said, beginning with
7 the first one in 1996.

8 Q: And did that input follow through to December
9 2013 when the amended and restated Development
10 Agreement was entered?

11 A: Yes.

12 **MR. WALKER:** Your Honor, we can show that there's a
13 recording information. Could we just highlight
14 that?

15 Q: First, do you know whether or not the
16 Development Agreement is recorded?

17 A: Yes, I have a full and complete recorded copy on
18 my laptop.

19 Q: Does the recording information appear on the
20 photocopy that's been marked as Respondent's
21 Exhibit 4?

22 A: Yes, there's the BP I believe is the deed book,
23 and the number of pages is 434 pages that
24 comprise the entire document that was recorded.

25 **MR. WALKER:** What we would say, Your Honor, since



1 it's a recorded instrument and it embodies the
2 contract and for all the other reasons I've
3 said, it's not just a, quote, statement. It is
4 a contract that's binding on both sides, that it
5 is relevant.

6 **THE COURT:** But, I know, one of them's -- one issue
7 is whether it's authentic. I get that it's
8 authentic, I think. I'll hear from her one more
9 time, but I think that's established. But why
10 is it relevant one more time?

11 **MR. WALKER:** It's relevant because it imposes an
12 obligation for certain sensitive methods. It's
13 not just, Your Honor, we're going to be good
14 boys. It says you need to do this. It sets
15 forth limitations on what can be developed. It
16 is in effect beyond the zoning. It is an
17 agreement that is restrictive as to what can
18 happen on Captain Sam's. It contains
19 obligations of the property owner to do certain
20 things and those certain things include
21 providing beach parking a good deal farther west
22 than Beachwalker Park; it includes a
23 conservation easement; and, as I said earlier,
24 it includes certain development methods that are
25 environmentally sensitive.



1 **THE COURT:** Okay.

2 **MR. WALKER:** We also have vested rights in here and
3 we want to show that the rights are vested.

4 **THE COURT:** All right. With all that said, that's
5 the purpose of it, under what legal theory is
6 that an issue here? You said that you want to
7 show compliance with the Coastal Zone program,
8 I think you said CZMP, but legally, tell me why
9 -- I mean, that's your purposes.

10 **MR. WALKER:** Yeah.

11 **THE COURT:** How does it fit within the legal
12 challenges that are before me?

13 **MR. WALKER:** Number one, we want to show what the
14 local government did. We think that's a
15 pertinent consideration that's expressed in this
16 agreement. Number two; we want to show we have
17 a vested right to proceed. Number three, we
18 want to show that these obligations or these --
19 what we're doing is in part an obligation
20 published under the Development Agreement.

21 **THE COURT:** All right. Ms. Armstrong?

22 **MS. ARMSTRONG:** Yeah, none of those three things, not
23 one of them, relates to the certification
24 decisions at hand. What the local government
25 did doesn't; whether they have vested rights



1 doesn't; whether there are obligations imposed
2 by this agreement, I mean this is -- he hasn't
3 cited any provision of the Act or the Coastal
4 Management Program policies that would relate to
5 any of these things that would make this
6 relevant.

7 **MR. WALKER:** I beg to differ. I believe there are
8 provisions with the CZMP that talk about local
9 governments. And that their policies are to be
10 considered. This expresses, in essence, a
11 policy with respect to Captain Sam's Spit. They
12 signed that agreement ---

13 **THE COURT:** Well, if that's in there, I would agree
14 with you. But I don't know one way or the
15 other.

16 **MR. WALKER:** Well, we were getting ready to ask the
17 witness about the provisions on Captain Sam's
18 Spit the Town committed to it and in that, that
19 would have to be its policy.

20 **RULING OF THE COURT:**

21 **THE COURT:** All right. I tell you what, I am going
22 to let this in for the purpose of showing
23 compliance with the CZMP. If there is no
24 requisite that I subsequently find out that
25 links it up to the CZMP, then it would not be



1 relevant. So I'm letting it in for that
2 purpose.

3 **MS. ARMSTRONG:** Your Honor, with all due respect, we
4 had a witness that was testifying and there was
5 an objection to that evidence coming in because
6 there wasn't a specific provision of the CZMP
7 applicable, but you put the burden on us to show
8 you what ---

9 **THE COURT:** --- sure?

10 **MS. ARMSTRONG:** --- provisions of the CMP applied.
11 Now, that same rule isn't being applied in the
12 converse where ---

13 **THE COURT:** Well, the only reason I'm -- if I am
14 being more lenient this time, it is because I
15 seem to remember that that is a provision myself
16 and -- in the pervious case. I mean, all this
17 stuff came in in the previous case and I -- I
18 remember zoning was pertinent, but I don't
19 remember specifically why, but I thought it was
20 because of the CZMP.

21 **MR. WALKER:** Well, just for an example, the CZMP
22 incorporates the policies, 48-39-20, and 48-39-
23 30. 48-39-30 is the one ...

24 **THE COURT:** But I think I'm going to switch now,
25 given what Ms. Armstrong said, you're going to



1 need to -- so, go ahead, you might need to show
2 me how it fits now.

3 **MR. WALKER:** And so it says that there's not -- the
4 policy's basically about ill-planned
5 development.

6 **THE COURT:** Yeah.

7 **MR. WALKER:** All right. We're showing this to show
8 it's not ill-planned; it was fully considered by
9 the Town, and this shows that it would be proof,
10 direct and circumstantial, that the development
11 is not ill-planned. So on that point alone ...

12 **THE COURT:** Yeah. Well ---

13 **MR. WALKER:** And we also point out ---

14 **THE COURT:** Hold on one moment. All right.

15 **MS. ARMSTRONG:** Your Honor, Ms. White ---

16 **THE COURT:** My struggle is right now is the
17 petitioners wish for the previous witness, I
18 can't remember his name, but the one I had to
19 proffer, for me to consider the CZMP, but your
20 argument was they haven't raised it, not
21 specific, or maybe it was Mr. Churdar's
22 argument. So I don't even know if this issue's
23 raised at this point in time. At least this may
24 not even be before The Court. I tell you what,
25 I'm going to let you -- go ahead. I want to



1 hear your response. Now, I'm more at the
2 proffer stage.

3 **MS. ARMSTRONG:** Sure, Ms. White reminded me that when
4 we were making arguments on the admissibility,
5 it was Dr. Gibbons, Whit Gibbons' testimony ---

6 **THE COURT:** Yeah, that's what I'm going back to.

7 **MS. ARMSTRONG:** --- and we raised -- right, and we
8 raised compliance with the provisions of the
9 Act, 48-39-20 and 30 and 150, and the Department
10 stood up and said those don't -- those apply to
11 critical area permits.

12 **THE COURT:** That's what I was just saying ---

13 **MS. ARMSTRONG:** They don't apply here.

14 **THE COURT:** --- just now.

15 **MS. ARMSTRONG:** Right. That's ---

16 **THE COURT:** I beat you to it.

17 **MS. ARMSTRONG:** You did.

18 **THE COURT:** But my problem is if the Department's
19 right, then this isn't relevant because you
20 never even raised any of this. So, you know ---

21 **MS. ARMSTRONG:** Well, we would certainly raise
22 compliance with the provisions of the Act and I
23 think ---

24 **THE COURT:** The CZMP?

25 **MS. ARMSTRONG:** The Coastal Zone Management Act.



1 **THE COURT:** Yeah.

2 **MS. ARMSTRONG:** And we raised compliance with the
3 policy, of course, not -- we didn't raise
4 compliance with whether it's consistent with
5 local zoning. When we would concede that that
6 is consistent with local zoning and don't really
7 think it's relevant to the inquiry before The
8 Court, at least certainly not as far as the
9 petitioners have raised. I mean, I think all of
10 this evidence -- all the points that Mr. Walker
11 would like to get in about the type of
12 development can certainly be made through this
13 witness without the document in evidence. I
14 mean, it's a pretty big document that's got ---

15 **FURTHER FULING OF THE COURT:**

16 **THE COURT:** Well, I'm going to -- at this point in
17 time, I'm going to allow you to proffer it and
18 then I will decide later on along with Dr.
19 Gibbons' testimony.

20 **MR. WALKER:** Your Honor, if I might add a couple
21 things.

22 **THE COURT:** All right.

23 **COURT REPORTER:** I'm sorry; if you might add what?

24 **MR. WALKER:** A couple things.

25 **COURT REPORTER:** Thank you, I'm sorry.



1 **MR. WALKER:** First, the Coastal Zone Consistency
2 Certification, the terms of it, refer to this
3 document in two places. Condition six refers to
4 the Development Agreement -- to the obligations
5 in the Development Agreement. And condition
6 seven refers to the conservation easement
7 obligation in the Development Agreement and says
8 in accordance with the planned unit development
9 agreement. So the Department has fully
10 considered it and it was part of the
11 certification that we've got to comply with.
12 And so we're showing it to have its full terms
13 because it was referred to in summary fashion
14 here ---

15 **THE COURT:** And that is, here being?

16 **MR. WALKER:** --- this is the certification -- the
17 consistency certification in this case.

18 **THE COURT:** Well, then I -- I'm going to allow it in
19 to the extent that it was considered in the
20 certification agreement, then, obviously.

21 **MR. WALKER:** And that also ---

22 **THE COURT:** So what component? What part of it?

23 **MR. WALKER:** Both as to the conservation easement and
24 the number of boardwalks across to the beach.

25 **THE COURT:** Well, those elements of it I'll allow.



1 So it's not admitted for the truth of the matter
2 asserted at this point in time, except for those
3 two provisions.

4 **MR. WALKER:** The other provision of the -- and just
5 referring to the CZMP I mentioned, the policies
6 of 48-39-30, and (d) does not quote it as a
7 statute, but the language is completely cut and
8 pasted into the guidelines for evaluation of all
9 projects at page III-14 of the CZMP, it says to
10 the extent the project will further the policies
11 of the South Carolina General Assembly, which
12 are mandated for the Coastal Council in the
13 implementation of its management program. These
14 being to promote the economic and social
15 improvement of the citizens of this State, and
16 to encourage development of coastal resources.
17 In order to achieve such improvement with due
18 consideration for the environment, and within
19 the framework of a coastal planning program that
20 is designed to protect sensitive and fragile
21 areas from inappropriate development and provide
22 an adequate environmental safeguards with
23 respect to the construction of facilities in the
24 critical areas of the Coastal Zone. Now, I read
25 this a little differently or let me say it's



1 ambiguous. I do think that this gets directly
2 to their argument. They keep saying it's
3 inappropriate to develop Captain Sam's and we're
4 able, I think, to say well, in this Development
5 Agreement, and its terms, they create a vested
6 right under certain conditions to do this.
7 Local government -- that is an indicia of
8 appropriateness. Now, they may put up other
9 evidence, but we're certainly entitled to show
10 what the local government thought was
11 appropriate.

12 **THE COURT:** And that what you're reading out just now
13 was the ---

14 **MR. WALKER:** The guidelines for evaluation of all
15 projects in the CZMP, section III, page 14.

16 **THE COURT:** All right. Without looking at this
17 entire 434 -- is it a 434 page document? What
18 in this document relates directly to that
19 provision?

20 **MR. WALKER:** I would say that there are provisions in
21 this Development Agreement about the provision
22 of utilities, that there aren't going to be
23 septic tanks, that CZMP specifically says there
24 shouldn't be septic tanks. This agreement
25 requires that there be public water and sewer.



1 **THE COURT:** Well, can you limit this to a specific
2 section in this agreement?

3 **MR. WALKER:** Yes, yes, I can limit the sections.

4 **THE COURT:** Well, that's what I'm asking.

5 **MR. WALKER:** Yes. We would limit it to -- well, at
6 this time ---

7 **THE COURT:** I can allow you to come back and we can
8 discuss this later if you want for the sake of
9 efficiency.

10 **MS. ARMSTRONG:** Yeah, we'd be glad to do that. And,
11 Your Honor, I mean, I think that it's just
12 brought our -- from the petitioner's standpoint,
13 this is a big document to let in, the whole
14 thing, for just the whole truth of the matter,
15 so we're glad to work -- try and come to some
16 agreement on ---

17 **THE COURT:** Because that sounds like he's got some
18 areas of the document that are admissible, but
19 I don't think we need the whole 484 pages. I
20 mean, the Court doesn't look forward to reading
21 the 434 -- 434 pages.

22 **MR. WALKER:** And we did not -- we're not putting in
23 all pages. We were only putting in the text,
24 plus two pages of exhibits. Most of those pages
25 relate to exhibits that are not being proffered



1 because they have nothing to do with Captain
2 Sam's.

3 **THE COURT:** So you say you're putting in the text
4 plus two?

5 **MR. WALKER:** Plus there are two exhibits that relate
6 to Captain Sam's.

7 **THE COURT:** So you're saying you're putting in the
8 434 pages. When you said text.

9 **MR. WALKER:** I'm sorry. I didn't mean -- I'm
10 distinguishing between the body of the agreement
11 and the exhibits.

12 **THE COURT:** Oh, okay.

13 **MR. WALKER:** We're putting in the body of the
14 agreement, plus the two short exhibits, the
15 three pages that relate to Captain Sam's.

16 **THE COURT:** Well, let's see if we can narrow this
17 exhibit down later on. But along the lines of
18 what you just said, I'll allow -- I'm going to
19 allow those portions in and I'll allow the
20 witness to continue going ---

21 **MR. WALKER:** Thank you, Your Honor.

22 **THE COURT:** --- along these lines.

23 **(Respondent's Exhibit Number 4 was admitted into**
24 **evidence.)**

25 **Q:** Mr. Pantlik, before we broke for this



1 discussion, you were about to direct us to a
2 particular page on Exhibit 4.

3 A: Page -- page 23 of the agreement under section
4 XVI, F, it begins with describing Captain Sam's
5 Spit, parcel 12(b).

6 Q: Is that what you're talking about that's not on
7 the screen?

8 A: Yes.

9 Q: And how many pages is the Captain Sam's
10 provision there?

11 A: Two pages.

12 Q: So it would be pages 21 and 22? I'm sorry ---

13 **THE COURT:** Looks like 23 at the bottom of that page.

14 **MR. WALKER:** I can't -- my eyes are so bad, I was
15 about to ---

16 Q: 23 and 24?

17 A: 23 and 24, there's -- looks like one sentence
18 carries over to page 25.

19 Q: And generally speaking, what do those two pages
20 within the Development Agreement cover?

21 A: Well, they address low impact development intent
22 certainly by the discussions that deal with the
23 limiting of road rights-of-way and road -- road
24 widths in the middle part of page 23. It sets
25 -- it set forth an obligation for us to provide



1 a eight-space parking area along with a beach
2 access way to be given to the Kiawah Island
3 Community Association.

4 Q: All right. Let's pause for one second here.
5 What is the Kiawah Island Community Association?

6 A: That is the overall POA that every property
7 owner on Kiawah, with a few exceptions, is
8 mandated to be a member of. They take care of
9 the beach access facilities within the private
10 gated community; they maintain the roadways for
11 the most part; and all guests and owners of KICA
12 are allowed to use such facilities.

13 Q: Approximately how many properties would you say
14 are included in KICA?

15 A: I'm going to just guess, 3,500 or so.

16 Q: Is there also a discussion about preservation of
17 the land?

18 A: There is. They're sort of -- the agreement
19 speaks to two different obligations, one of
20 which is the establishment of a conservation
21 easement over all of the unused land that's
22 defined in the Agreement under Parcel 12(b), so
23 any land above the mean high water that is not
24 used in residential lots or other facilities is
25 required to be conveyed in or passive green



1 space to -- it's suggested that the Kiawah
2 Island Natural Conservancy be the receiver of
3 such a conservation easement.

4 Q: What would be the duration of the conservation
5 easement?

6 A: Perpetuity.

7 **MR. WALKER:** And if we could go back to the first
8 page again, please, Dave. Can you go to the
9 first paragraph, if you could bring that out?

10 Q: Now, the second sentence here refers to
11 highland, do you see that?

12 A: I do.

13 Q: There was some testimony from Mr. Byrnes about
14 highland on his plats, are we talking about the
15 same definition of highland or the same use of
16 the word highland?

17 A: No, the term here is representative of the land
18 above the mean high water line, which is
19 generally what is understood to be held in
20 private ownership. And to me, it sort of
21 follows that we can only control what we own and
22 this is expressing the full amount of land that
23 we own.

24 Q: Now, I would like you now to go to section
25 15(A) (i) (b) on page 19. Is there another



1 section here that deals with Captain Sam's Spit?

2 A: There is. I did mention a moment ago about the
3 provisioning of a eight-space beach parking area
4 along with a -- an easement and boardwalk to
5 facilitate the access to the beach via this
6 parking area that's described in 15(A)(i)(b).

7 Q: Where is this parking area in relation to
8 Beachwalker Park?

9 A: It's several thousand feet west of Beachwalker
10 Park. It's much further down the beach. It is
11 more or less near the end of the phase one
12 limits of the roadway that were permitted.

13 Q: Do the KICA members currently have access aside
14 from walking down the beach to a parking area
15 that far west?

16 A: No, they don't.

17 Q: All right. I'd ask you to turn to Exhibit 16-2,
18 which should be the last page there. It should
19 be the last page of this exhibit. Is that --
20 what is that?

21 A: Well, this is an exhibit that illustrates
22 generally -- of course, as it says, as of 2011
23 the overall limits of the property that we own
24 and it's setting forth generally speaking in a,
25 the yellow or cream color, a separate conveyance



1 in addition to the establishment of the
2 conservation easement over this area. This is
3 a required conveyance of a beachfront strip to
4 the Kiawah Island Community Association. The
5 lighter green color, along with some of the
6 other darker green areas, that are -- will be
7 unused at the time of final development, those
8 are all subject to the conservation easement.

9 **THE COURT:** All right, so when you say lighter green,
10 then darker green, it looks a little bit like
11 gray to me, is that what you're referring to?

12 A: Oh, yeah, on this printed page, it looks to be
13 a darker green. I suppose it does look gray --
14 it's kind of washed out.

15 **THE COURT:** On the ---

16 A: On the screen, yes. Yes, sir.

17 **THE COURT:** The lighter green is marsh?

18 A: It is generally marsh that conforms to the
19 critical line delineation that we had in 2011.

20 **THE COURT:** All right.

21 Q: And if you go up to the parcel twelve acreage
22 box total up at the top, what is the total?

23 A: It's 155.341 acres.

24 Q: And what is that comprised of?

25 A: Well, using the term highland as the surveyor



1 construed it, that land above the critical line
2 and that which was above the baseline. There's
3 38.226 acres. The remaining land that's above
4 mean high water that's essentially the
5 marshland, the lighter green color, and really
6 the yellow color, as you refer back to Exhibit
7 16.2, is 117.115 acres.

8 Q: All right. Thank you. And now if you would go
9 a couple pages behind that and another page, two
10 pages behind it, is that another exhibit to the
11 Development Agreement?

12 A: It is. This is an important table because it
13 tracks where the various different parcel
14 designations within the overall agreement and,
15 of course, it's important because it sets forth
16 those land uses and density and all of the
17 different criteria you see there, specifically
18 for parcel twelve, which is the Captain Sam's
19 area.

20 Q: Is Captain Sam's shown in this table in the
21 column that's one end from the left?

22 A: Yes.

23 Q: What is the numerical designation for Captain
24 Sam's?

25 A: Parcel 12(b).



1 Q: Now, if we go all the way over to the column
2 that's one away on the right, maximum height and
3 stories, what does that say?

4 A: It says -- the footnote, if you could see it,
5 it's really referring to two and a half stories
6 or 40 feet total.

7 Q: Has the developer voluntarily agreed to do a
8 different height limit?

9 A: Absolutely. We are committed to only a story
10 and a half above the required building elevation
11 the Town has created.

12 Q: The next reference I'd like you to turn to in
13 the Development Agreement is on page IV, section
14 10(b).

15 A: Yes.

16 Q: Are you familiar with that provision?

17 A: I am. I've reviewed that particular citation
18 for the South Carolina Code that deals with the
19 vested rights that a landowner may have and as
20 I understand it, this ---

21 Q: I don't want you to go into your understanding.

22 A: Okay.

23 Q: But what is the title of this section?

24 A: Vested rights

25 Q: All right. And could you read that one sentence



1 there?

2 A: Subject to the provisions of subparagraph (a)
3 above, all rights and prerogatives accorded the
4 property owner by this agreement shall
5 immediately constitute vested rights for the
6 development of the real property.

7 Q: Thank you, Mr. Pantlik. Now, let's get back to
8 -- and you can take that down. Let's get back
9 to the process for assessing the development of
10 Captain Sam's. What would be or what was the
11 first major step? What information did you need
12 first in order to begin your assessment?

13 A: Well, we needed to update the -- effectively the
14 boundary survey, which we -- there's been at
15 least testimony about it, the 2006 boundary
16 survey. As we started our more detailed
17 planning in 2010 and 2011, we updated -- we had
18 our surveyor update the mean high water line.
19 That was one step. And then he sought the -- an
20 update to the critical line. We also overlaid
21 on that boundary survey the latest beachfront
22 management jurisdictional lines, the baseline
23 and the setback line, so that we could have a
24 clear and accurate picture of the amount of land
25 and that is subject to development.



1 Q: Did Kiawah Partners engage a consultant to
2 determine whether there were freshwater wetlands
3 on parcel 12(b), Captain Sam's, under the
4 Development Agreement?

5 A: We did. In addition to determining what
6 saltwater wetlands the land may be subject to,
7 OCRM jurisdiction, we hired a consultant with
8 Newkirk Environmental Consultants of Charleston
9 to inspect the property and then make a
10 submission to the U.S. Army Corps of Engineers
11 to attest to whether or not there were any
12 jurisdictional freshwater wetlands that would
13 not be within the jurisdiction of OCRM.

14 Q: Did they determine whether there were any
15 wetlands, freshwater wetlands?

16 A: There weren't any determined and the Corps
17 ultimately agreed with that opinion by their
18 letter they wrote to our consultant in June of
19 2011.

20 Q: Did you do anything to access the contours or
21 topography?

22 A: Yes, we take a -- we asked the surveyor to
23 provide us with a detailed topographic survey
24 along with citing the location of larger trees,
25 pine trees and live oaks as it turned out on



1 this site, and because of the dock opportunities
2 that we have with -- that are stated in the
3 Development Agreement we also had a -- an
4 underwater survey, a hydrographic survey done,
5 of the Kiawah River in proximity to the
6 development.

7 Q: Were all these part of the information you
8 needed to assess what you were going to do?

9 A: Yes.

10 Q: Now, let's talk about getting to a lot layout.
11 Are we yet to the point where we're laying out
12 lots?

13 A: well, all of what I've mentioned would be sort
14 of the necessary pre-requisite data or
15 information that a land planner would
16 appropriately need before starting to lay out
17 road systems and the lot configurations.

18 Q: Did Kiawah Partners use a land planner to do
19 that exercise?

20 A: Yes, Mark Lamar.

21 Q: How long has he been involved with development
22 on Kiawah?

23 A: Oh, gosh. I think since the early '80s.

24 Q: And based on your knowledge of what he did, did
25 he go on site?



1 A: Yes.

2 Q: Tell us about that.

3 A: Well, he -- Mark would -- as he would with any
4 effort like this, in addition to having the
5 survey information, he would walk the site to
6 get a feel of ---

7 **MS. ARMSTRONG:** Objection, Your Honor. I'm sorry, I
8 don't think this witness is testifying ---

9 **THE COURT:** He can't testify ---

10 **MS. ARMSTRONG:** I don't think he's testifying about
11 his personal knowledge, he's talking about what
12 somebody else does. I didn't hear a foundation
13 for how he knows what somebody else does.

14 **THE COURT:** I sustain that.

15 Q: Have you -- did you observe Mark doing his work
16 on the spit?

17 A: Yes.

18 Q: And what did you observe him doing?

19 A: Walking and inspecting the property with
20 relation to actual other I guess known marks
21 such as the beachfront management line. He
22 would have been studying the vegetation, the
23 cover. He had also collected information that
24 the Town had provided regarding where bobcats
25 may nest; he had collected information generally



1 about the piping plovers, where their habitat
2 is; and he had done some research about the
3 general locale of the diamondback terrapins.

4 **MS. ARMSTRONG:** Your Honor, I'm going to object and
5 ask that that be stricken because we went from
6 what he actually observed Mr. Lamar doing to
7 what -- if he can say he actually observed Mr.
8 Lamar collecting data, but that's pretty
9 specific and particular.

10 **THE COURT:** Mr. Walker?

11 Q: Did you provide any data ---

12 **THE COURT:** Well, not -- I didn't rule on her
13 objection. She said she wanted it stricken, so
14 ---

15 **MR. WALKER:** Well, I can -- I can hook it up.

16 **THE COURT:** Well, I would prefer to strike it and
17 then allow you to hook it up later.

18 **MR. WALKER:** Thank you. Which portion are we
19 striking? The research?

20 **THE COURT:** His testimony about the terrapins ---

21 **MS. ARMSTRONG:** Bobcats.

22 **THE COURT:** Well, the bobcats, nobody's disputing
23 bobcats, are they?

24 **MS. ARMSTRONG:** The point is that ---

25 **THE COURT:** The plover ---



1 **MS. ARMSTRONG:** --- it's still not his personal
2 knowledge and it's coming in ---

3 **THE COURT:** Well, okay.

4 **MS. ARMSTRONG:** --- about different animal species
5 that -- it's not the work that Mr. Pantlik
6 actually did. He -- sounds like he's
7 speculating. He thinks Mr. Lamar does it, but
8 he doesn't have any way of ---

9 **MR. WALKER:** I'll go around it.

10 **THE COURT:** Okay.

11 **MS. ARMSTRONG:** --- knowing that individually and
12 personally.

13 **Q:** Did you partake with Mr. Lamar in providing
14 information to him about bobcats or piping
15 plovers or any other species?

16 **A:** I -- I did not provide him with those areas of
17 knowledge about those animals, but I was
18 involved in submitting the preliminary plat to
19 the Town of Kiawah and there was a document
20 that ---

21 **Q:** All right. Let's not get into that. Let's
22 stick back to the whole planning process. At
23 some point did Mark come up with a conceptual
24 layout?

25 **A:** He did. The earliest one that I recall was from



1 March of 2009. And from something like a two-
2 year period, he would have developed a number of
3 different layouts and scenarios. From my
4 knowledge, he was not only sort of balancing
5 what ---

6 **MS. ARMSTRONG:** Objection, Your Honor, he's talking
7 about what somebody else did, not what he knows
8 personally.

9 **THE COURT:** Well ---

10 **MS. ARMSTRONG:** I understand Mr. Permar's going to be
11 on the witness stand. He can ---

12 **THE COURT:** Your objection is what he said, he's
13 testified to what he did. Actually, he was
14 testifying to a state of mind.

15 **MR. WALKER:** Well, he said to his knowledge was what
16 he was about to say, and then there was the
17 objection to his knowledge.

18 **THE COURT:** I thought he was testifying to Mr. -- is
19 it Permar?

20 **MR. WALKER:** Permar.

21 **THE COURT:** Permar's knowledge.

22 **MR. WALKER:** We better make that clarification.

23 **THE COURT:** Yeah.

24 Q: Were you testifying about Mr. Permar's knowledge
25 or to your knowledge?



1 A: To my knowledge, having received a number of
2 different lot layouts that contain different
3 scenarios for how one might develop the spit.

4 Q: And the last thing in terms of just information
5 that I'm going to ask you deals with the soils.
6 Was anything done to look at that on Captain
7 Sam's?

8 A: There were two different efforts. One was done
9 by S&ME, a geotechnical firm that has offices in
10 Charleston. They did sort of an overview of ---

11 **MS. ARMSTRONG:** Objection, Your Honor, I mean, he's
12 talking about what somebody else did again, not
13 of his own -- not his own personal knowledge.

14 **THE COURT:** Well, I think he just styled what they
15 did, an overview. If he gets into the
16 specifics, I think you can object. But to the
17 results of that overview.

18 **MS. ARMSTRONG:** I don't think the foundation's been
19 laid that he knows that they actually did it.
20 Did he hire them himself? Did he communicate
21 with them? Did he ---

22 **THE COURT:** Well, sounded like that's where he was
23 going, but ---

24 **MR. WALKER:** Well, I can ask all those questions.

25 Q: Did you communicate directly with S&ME?



1 A: In this first case, I did not, in that the
2 information was being obtained in support of the
3 stormwater application and the design engineer,
4 Rick Karkowski, had a specific need and so he
5 communicated what he ---

6 Q: All right. So did you approve that?

7 A: I did.

8 Q: And was there a second aspect of the soils
9 investigation?

10 A: There was another soil investigation done
11 specifically for the design of the sheet pile
12 wall.

13 Q: Are you familiar with that?

14 A: I am.

15 Q: How so? Not getting -- don't tell me the
16 conclusions, but how do you know it was done?

17 A: It was -- it was done in 2008 and it was done by
18 Wright Padgett. They did detailed studies of up
19 to a depth of 30 feet or so to determine the --
20 not only the surface soils, but the deeper soil.

21 Q: All right.

22 **MR. WALKER:** I am game to go down another -- it's
23 going to go a while. Do you want to take a
24 break or just keep it trucking?

25 **THE COURT:** Take a break, that's what I want to do.



1 We keep saying five minutes, and it's been about
2 ten minutes every time, but five minutes again.

3 (A break was taken from 3:52 p.m. until 4:06 p.m.)

4 COURT REPORTER: All rise.

5 THE COURT: All right. Y'all be seated. Thank you.

6 MR. WALKER: Thank you, Your Honor.

7 THE COURT: I spent my break debating your legal
8 arguments, so.

9 MR. WALKER: Well, I've got a new -- a new piece to
10 add to it, too.

11 THE COURT: Oh, good. Thanks.

12 MR. WALKER: But I'll go back to the testimony of the
13 witness.

14 THE COURT: All right.

15 Q: Mr. Pantlik, what's the first step in the
16 approval process? What do you do once you've
17 figured out the layout?

18 A: We would submit a application for preliminary
19 plat approval to the Town of Kiawah in this
20 case.

21 Q: Was that done?

22 A: It was.

23 Q: When was that done?

24 A: In June of 2011.

25 Q: What happened?



1 A: Ultimately ---

2 Q: Who determined that?

3 A: Oh, that would be the Town of Kiawah Island
4 Planning Commission.

5 Q: Did you appear before the Planning Commission?

6 A: I did.

7 Q: Did Mr. Permar appear?

8 A: I believe he did, yes.

9 Q: What was the result?

10 A: They approved the preliminary plat.

11 **(Respondent's Exhibit Number 1 was introduced into the**
12 **record at this time.)**

13 Q: I'm going to ask you to turn to KDP Exhibit
14 Number 1. Not joint, not joint.

15 A: Yes.

16 Q: So it's the second batch ---

17 A: Oh, okay.

18 Q: Can you identify the letter that's the first
19 page of 1?

20 A: Yes, this was written from the Planning Director
21 of the Town of Kiawah and it's confirming that
22 the Town Planning Commission approved that plat
23 on August 3rd, 2011.

24 Q: And what is behind the letter?

25 A: That plat that they approved.



1 Q: Now, if you would go to I guess sheet three,
2 three and four.

3 A: Okay.

4 Q: And what do sheets three and four show? Three
5 and four.

6 A: They -- they depict in combination all of the 50
7 home sites that would be referenced in the
8 Development Agreement and the road right-of-way,
9 along with the pump station site, the location
10 of the beach parking area, the roadway and the
11 direction of drainage flow and the community
12 dock site that's included within the total
13 project.

14 Q: Could you show us where the community dock site
15 is here?

16 A: (Witness compiles.)

17 Q: Are any more docks planned for Captain Sam's on
18 the river at this time?

19 A: There are -- no, just one is planned currently.

20 Q: Were there any conditions on that approval?

21 A: I don't recall any special conditions.

22 Q: All right.

23 A: Certainly there aren't any in the letter.

24 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 1:**

25 **MR. WALKER:** KDP moves for the admission into



1 evidence of its Exhibit Number 1, the cover
2 letter and the preliminary plat.

3 **MS. ARMSTRONG:** Objection, Your Honor. The cover
4 letter obviously is written by somebody that's
5 not here. It's certainly hearsay, an out-of-
6 court statement. I'm assuming it's being -- its
7 admission is being sought for the truth of the
8 matter. These plats are not stamped. They
9 haven't been -- they haven't been stamped and
10 shown that they're recorded. Mr. Pantlik didn't
11 create these drawings. He can't -- he can't
12 authenticate them. They're also -- they also
13 contain lots of hearsay.

14 **THE COURT:** What hearsay do they contain?

15 **MS. ARMSTRONG:** They contain -- there's words on --
16 all over these drawings, like where specific
17 things are, where roads are, bioretention areas
18 are, land titled to Kiawah Island Community
19 Association, I mean, there's all kinds of words
20 that are pointing to different lines and
21 different areas that Mr. Pantlik didn't create.

22 **THE COURT:** Well, were these documents submitted to
23 OCRM?

24 **MS. ARMSTRONG:** Well, I don't know. I don't think it
25 -- I don't -- if there's -- it's not indicated



1 on these documents that they were submitted to
2 OCRM.

3 **THE COURT:** Okay.

4 **MS. ARMSTRONG:** I mean, we didn't receive them as
5 part of the OCRM file through discovery.

6 **THE COURT:** That's why I was asking.

7 **MS. ARMSTRONG:** Yeah. I mean we received them from
8 KDP through discovery, but not from OCRM.

9 **THE COURT:** Mr. Walker?

10 **MR. WALKER:** Well, I can develop it and I'm happy to
11 go slower and develop his knowledge.

12 **THE COURT:** Okay.

13 **MR. WALKER:** And the second thing I would say is that
14 the guidelines for evaluation of all projects in
15 the CZMP, at page 314 that we referred to
16 earlier, number six is the extent to which the
17 project is in compliance with local zoning
18 and/or comprehensive plans. And this is proof
19 of compliance under the CZMP with local zoning.
20 There was some statement by Ms. Armstrong that's
21 not recorded. Preliminary plats do not get
22 recorded. And it's only the final plat, maybe
23 a conditional plat, that would be recorded, not
24 a preliminary plat. And I'll ask Mr. Pantlik.

25 **Q:** Mr. Pantlik, are you familiar with the plat



1 approval procedures of the Town of Kiawah
2 Island?

3 A: I certainly am.

4 Q: And how many years have you been dealing with
5 those plat approval processes?

6 A: Nearly 28 years.

7 Q: Is a preliminary plat recorded?

8 A: Never.

9 Q: Let's talk about the specifics of this
10 preliminary plat. Were you involved in
11 reviewing and approving the drawings, the
12 preliminary plat, that is attached as part of
13 Exhibit 1?

14 A: Yes.

15 Q: Did you deal directly with the engineers on
16 that?

17 A: Well, in this case, the surveyor, this is a
18 product of our surveyor ---

19 Q: Yeah.

20 A: --- but he would have needed certain information
21 from the engineer such as the pump station
22 layout and the road layout.

23 Q: Did you clear thee drawings before they were
24 submitted?

25 A: I did.



1 **MR. WALKER:** I would say he has -- we'd, again, move
2 for the admission of the letter and preliminary
3 plan.

4 **THE COURT:** As it stands now, I intend to admit them,
5 not for the truth of that which is asserted
6 regarding the surveys, but as to the location of
7 the lots and I'll hear each of your response.
8 What's your response to that?

9 **MS. ARMSTRONG:** Well, I think that they are ---

10 **THE COURT:** Or location of the -- when I say lots,
11 the residential development.

12 **MS. ARMSTRONG:** I think there are a lot of other
13 documents that might do this better that
14 wouldn't be hearsay or that could -- that Mr.
15 Pantlik could ---

16 **THE COURT:** Well, I'm dealing with what's ---

17 **MS. ARMSTRONG:** --- could in himself.

18 **THE COURT:** --- in front of me right now, so.

19 **MS. ARMSTRONG:** Well, I think it's being -- I think
20 it's being put forth to prove compliance with
21 local zoning and I think that it's hearsay to
22 that extent that that's the purpose of it. It's
23 certainly hearsay. Again, just having knowledge
24 of these, the creation of these done by a
25 surveyor doesn't make -- doesn't take them out



1 of the hearsay exception. It's still something
2 that he didn't create. He needed an engineer to
3 have input on it, so there was engineering input
4 that was given to the surveyor. He didn't
5 create these documents. I don't -- I don't see
6 how you get over the hearsay exception. The
7 only reason I mentioned the recorded aspect was
8 because that would come in under an exception to
9 the hearsay rule and I was just using that to
10 point out it doesn't come in under an exception
11 to the hearsay rule.

12 **THE COURT:** Okay.

13 **MR. WALKER:** And we're not -- this is not a
14 statement. This is a fact. The Town approved
15 a preliminary plat. Which plat did they
16 approve? They approved this one. I was there.
17 This is it. I mean, we're not going in it to
18 say here are all statements in here and this is
19 the truth of the matter. We're saying the local
20 government approved this design. That's what
21 they approved and he said that.

22 **RULING OF THE COURT:**

23 **THE COURT:** Well, I'll let it in for that -- for that
24 purpose, not for the truth of all -- everything
25 asserted, but for that which the local



1 government approved. Because he did testify to
2 that. All right, I'll let it in for that
3 purpose.

4 **MR. WALKER:** Thank you, Your Honor.

5 **(Respondent's Exhibit Number 1 was admitted into**
6 **evidence).**

7 **Q:** Now, once you had the preliminary plat approval
8 form the Town of Kiawah Island, did you move to
9 other permitting?

10 **A:** Yes. While we had -- while our engineers had
11 been preparing the stormwater plan, the
12 stormwater report, we held off on having them
13 submit that to DHEC until we had in hand the
14 Town preliminary plat approval.

15 **Q:** And once you did that, what happened?

16 **A:** Well ---

17 **Q:** Once you had it in hand.

18 **A:** --- we -- I asked them to submit what's called
19 a notice of intent, which accompanies -- which
20 is effectively the application for the
21 stormwater permit and the engineering
22 construction plans that detail the improvements
23 and the erosion control measures that are taken
24 along with the stormwater plan. We did that for
25 a subset of the total of 50 lots. We did it for



1 26. Choosing not to fully engineer the full 50
2 lot subdivision that was approved by the Town,
3 but only a phase one.

4 **(Joint Exhibit Number 3 was introduced into the record**
5 **at this time.)**

6 Q: Would you turn to Joint Exhibit 3, that's
7 already in evidence? I'm sorry, Ray, you're in
8 KDP exhibits. Go back to the first book.

9 A: Right.

10 Q: The Old Testament.

11 A: Okay.

12 Q: Do you have it there?

13 A: I do. It begins with a letter of transmittal to
14 who I understand is sort of the receiving clerk
15 for these NOI applications.

16 Q: Now, let me ask you this, did you review this
17 application too?

18 A: Yes, I did.

19 Q: Did you approve it?

20 A: Yes. It's not evident on this copy, but that I
21 would have been a signatory to the application.

22 Q: If we go to the very back of Joint Exhibit
23 Number 3, is there a set of plans?

24 A: Yes.

25 Q: Do you have them there?



1 A: I do.

2 Q: If you could just hold that up for the Court.
3 Just the cover page.

4 A: Pull out the first page.

5 Q: Was that the first set of engineered drawings
6 that was submitted to DHEC?

7 A: Yes, there's a note appropriately so that this
8 was the OCRM submittal version of dated August
9 8, 2011.

10 Q: Was there a public notice that was issued by
11 DHEC?

12 A: Yes, all of these projects that require a
13 Coastal Zone Consistency are typically out on a
14 ten-day public notice comment period.

15 **(Respondent's Exhibit Number 2 was introduced into the**
16 **record at this time.)**

17 Q: Now, I'm going to ask you to turn your attention
18 to Respondent's Exhibit 2, which is in the other
19 part of the notebook. Can you identify
20 Respondent's Exhibit 2?

21 A: Yes, this identifies our application for both
22 the NPDES stormwater permit and for a
23 consistency determination.

24 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 2:**

25 **MR. WALKER:** Your Honor, we would offer into evidence



1 KDP Exhibit 2, public notice.

2 **THE COURT:** Ms. Armstrong?

3 **MS. ARMSTRONG:** No objection, Your Honor.

4 **MR. CHURDAR:** No objection.

5 **RULING OF THE COURT:**

6 **THE COURT:** It's admitted.

7 **(Respondent's Exhibit Number 2 was admitted into**
8 **evidence).**

9 Q: Let's jump from here to this stormwater
10 application that we were talking about. Do you
11 oversee or at least are you involved with
12 stormwater plans for subdivisions throughout
13 Kiawah?

14 A: I work closely with our design engineer to
15 monitor what they're designing to make sure it
16 fits with our budgets and intent.

17 Q: Would you tell the Court whether or not there
18 are any aspects of this stormwater that set it
19 apart, this stormwater plan, that would set it
20 apart from what would typically happen in a
21 development on Kiawah Island?

22 A: Yes, in a general sense, when -- in many of the
23 other areas on Kiawah Island where there are
24 large open water lagoons either previously
25 constructed or part of a new development, often



times the scope of the sizing of the drain pipes and these lagoons are intended to collect and treat all of the runoff, 100 percent. That which not only comes -- that's generated from the roadways, but also from all of the rooftops and the driveways and sort of a hundred percent of the generated stormwater in a built environment would be routed through these systems. Because of the sensitivity to this area, we wanted to set it apart in that we set forth that we would not disturb except what is minimally required for a particular home and that none of the stormwater generated by a private drive, which are all shared in this development, or the rooftop, none of that runoff runs off into the street and elsewhere. It must be routed to depressions or lower areas within a home site.

Q: Is there any other place on Kiawah Island that manages the stormwater in such a way that it's not routed into a street?

A: We've never proposed such a subdivision. In addition, while many of our other projects may treat stormwater with roadside swales and lagoons, in this case, the stormwater that is



1 generated off of the roadway are routed to
2 grassy depressional areas called bioretention
3 areas. And these are areas that have a special
4 quality of taking what nutrients that may be in
5 the stormwater and they better filter it before
6 any potential discharge into the surrounding
7 waters.

8 Q: Will any septic tanks be allowed on Captain
9 Sam's?

10 A: No, by -- by our election and by the Town
11 requirement, if you're within a certain distance
12 of a community water or sewer system, you must
13 tie into it and that's what we are doing by
14 extending systems from the Kiawah Island Utility
15 Company to this development area.

16 **(Respondent's Exhibit Number 4 was introduced into the**
17 **record at this time.)**

18 Q: Would you please turn to Joint Exhibit 4? In
19 the first part of your book. Do you recognize
20 that?

21 A: Yes, it's an application I signed on April 1st,
22 2013, to construct a -- both the water system
23 and the waste water system for this first phase
24 of Captain Sam's.

25 Q: Now, who is the applicant on the application for



1 the water and wastewater?

2 A: KRA Development, LP.

3 Q: Would you explain for the judge the difference
4 between KRA -- or at least the role of KRA
5 Development, LP, versus KDP II?

6 A: At the time of this ownership of our company, we
7 have set up different entities. KDP II was a --
8 sort of an investment holding company and KRA
9 Development, LP, was the development company.
10 And in this case, we thought it simpler just to
11 go ahead and make application under the
12 development company entity even though that
13 particular entity wasn't the property owner.

14 Q: At the end of the day in May -- at the end of
15 the May 2015, to what entity were the water and
16 wastewater permits issued?

17 A: KRA -- well, KRA Development, I believe.

18 Q: All right. Now, let's talk about the progress
19 of this application. It was put in in August of
20 2011. Did things proceed on pace?

21 A: No, I mean, the record will show that the
22 permits were not granted until May of 2015.
23 Best way I can ---

24 Q: Did you participate in communications with the
25 agency about it, about the progress of this?



1 A: We did.

2 Q: And what -- what were or what was the principle
3 reason for, in your estimation, for the time it
4 took in the first couple of years?

5 A: Well, to explain, every application like this is
6 really two in one. You may be applying for the
7 stormwater permit, but there's a concurrent
8 review also for the consistency determination
9 that the Department must make and so at various
10 times, we would have received questions from
11 either the consistency manager or the person
12 reviewing the technical aspect of compliance to
13 the stormwater permit.

14 Q: Were you involved with the question about
15 consistency?

16 A: I was. I had several discussions, meetings ---

17 Q: No. What was the hang-up about consistency as
18 far as you knew?

19 A: I think what was -- it came to be identified was
20 the absence of a so-called contingency plan for
21 the erosion that had been historically occurring
22 on the riverside and there was no introduction
23 of erosion control measure when we made the
24 initial application in 2011.

25 Q: And during this time, what was going on with the



1 bulkhead and revetment?

2 A: We had originally ---

3 **MS. ARMSTRONG:** Objection, Your Honor.

4 Q: I mean, what was the status of it?

5 **THE COURT:** Well, okay, you're just rephrasing it?

6 **MR. WALKER:** Yeah.

7 Q: What was the status of that?

8 A: That it has ---

9 Q: Just very simply.

10 A: It was in litigation.

11 Q: Thank you. Now, was there a plan arrived at to
12 deal with the contingency for ---

13 A: Yes.

14 Q: --- guarding the road in the event of continued
15 erosion?

16 **MS. ARMSTRONG:** Objection, Your Honor, leading a
17 witness.

18 Q: Was there a plan that was developed?

19 A: There was a plan to install a sheet pile wall
20 along the erosive escarpment at the site.

21 Q: Did you commission plans for the in-ground steel
22 sheet pile wall?

23 A: I did.

24 Q: And who was contracted to do that?

25 A: Thomas and Hutton Engineering.



1 Q: And was there a particular individual there?

2 A: Jenn Hayes was the structural engineer that
3 headed up that design effort.

4 Q: Were those -- was the design of the wall -- what
5 happened to the design of the wall? Was it
6 incorporated at all into the plans?

7 A: Yes, we eventually -- I believe it was in the
8 latter part of 2014, we amended our original
9 application to expressly include the
10 construction of a steel sheet pile wall.

11 Q: What was the original length, approximate
12 length?

13 A: 2,380 feet as I recall.

14 Q: Was there a time when -- was it always that
15 length or was ---

16 A: well, the earlier case dealing with a
17 combination of timber bulkhead revetment dealt
18 with a structure that was around 2,800 feet.

19 Q: Okay. We've looked at some drawings on the
20 steel sheet pile wall, and I'd ask you to go to
21 Joint Exhibit Number 7.

22 **(Joint Exhibit Number 7 was introduced into the record**
23 **at this time.)**

24 Q: And if you go to the next to the last page of
25 Joint Exhibit 7. Do you see that?



1 A: I do.

2 Q: What is that?

3 A: That's sheet number S1.0 and it's entitled the
4 steel sheet pile wall layout.

5 Q: Now, I'm going to ask Dave here to bring up the
6 portion of it right above the little marsh
7 island. Do you see that? Just to the left of
8 the center, not so much. All right. Now,
9 looking at the different stations of the wall
10 and then coming out to the river, does it show
11 anything about the sequence of installation?

12 A: Yes, incorporated into the overall plan is a
13 phase delineation of two sections of wall. The
14 phase one is say more confined to the neck and
15 the residential area and then phase two, which
16 conceivably could be installed after phase one,
17 runs to the northwest up to the southeast corner
18 of the parking area of the Beachwalker Park.

19 Q: Would the installation of that wall as designed
20 provide any protection to the Beachwalker Park?

21 **MS. ARMSTRONG:** Objection, Your Honor, this witness
22 is not qualified to give an opinion about
23 whether a wall would give protection to the park
24 or not.

25 **MR. WALKER:** Well, I understand that he's -- he's not



1 qualified as an expert, just -- but he is an
2 engineer and he was integrally involved in the
3 design.

4 Q: What is the purpose of having the wall go to
5 where it goes at the Beachwalker parking lot?

6 MS. ARMSTRONG: Objection, Your Honor, he's calling
7 this witness to give an opinion -- give his
8 opinion.

9 THE COURT: He said what was the purpose, wasn't it?

10 MR. WALKER: Yeah, that's right.

11 MS. ARMSTRONG: I mean, I don't know -- he hasn't
12 laid a foundation for how the witness would be
13 able to testify about what the purpose is other
14 than what's already been testified to, which is
15 that it's an eroding shoreline and it's been
16 there to stop the erosion.

17 THE COURT: Well, he testified to his position with
18 KDP and ---

19 MS. ARMSTRONG: And he asked a question about the
20 park, which makes it even further removed
21 because he's talking about the Beachwalker Park,
22 the parking lot now.

23 THE COURT: Mr. Walker, anything else?

24 MR. WALKER: I'll lay a greater foundation for this.

25 THE COURT: Well.



1 Q: Were you involved in or were you involved in
2 determining the reach of the wall? The length
3 and the location of the wall?

4 A: Yes, and in this case we wanted ---

5 Q: All right. To who did you confer -- who did you
6 confer with?

7 A: Well, with Jenn Hayes, who was the designer with
8 Thomas and Hutton.

9 Q: And what is the purpose of the wall in the
10 Beachwalker parking lot?

11 **MS. ARMSTRONG:** Objection, Your Honor. I can ---

12 Q: What is your purpose?

13 **MS. ARMSTRONG:** Objection.

14 **THE COURT:** I overrule it.

15 A: The purpose is to -- in -- as it's progressed as
16 of this day, to stop the asphalt at this point
17 from falling into the river because there's been
18 unarrested erosion for many years. It's one of
19 the highest points of the erosional escarpment
20 in the whole system there. And it represents a
21 danger to the public.

22 **MS. ARMSTRONG:** Objection, Your Honor. I move to
23 strike that last statement. He's definitely not
24 qualified. He has no basis for making an
25 opinion about ---



1 THE COURT: Well, at this point in time, I'll sustain
2 ---

3 MS. ARMSTRONG: --- what's dangerous to the public.

4 THE COURT: I sustain the objection and strike the
5 comment about danger to the public, unless you
6 want to lay a foundation for that, Mr. Walker.

7 MR. WALKER: Well, I -- my response would be that
8 that is something -- it doesn't require an
9 expert opinion, it's a lay opinion about the
10 danger that's presented and he can -- it's not
11 ---

12 Q: How often are you out there? Do you ---

13 THE COURT: Well, I'll just respond by saying a lay
14 person can say -- talk about how they perceive
15 something, but an expert talks about it is. So
16 I stick with my ruling.

17 MR. WALKER: All right.

18 Q: Do you, Ray Pantlik, think that that particular
19 area is safe without some stabilization?

20 A: No, and as evidenced by measures taken by the
21 manager of the park ---

22 MS. ARMSTRONG: Objection, Your Honor, now he's going
23 to get some hearsay in about what the park
24 person ---

25 MR. WALKER: All right. Well, what has ---



1 Q: What have you observed in the parking lot in
2 this area?

3 A: At the PRC, the Charleston Parks and Recreation
4 Commission, has put up metal barricades to
5 prevent parking ---

6 **MS. ARMSTRONG:** Objection, Your Honor, he's -- he can
7 testify what he's observed. He's -- and now
8 he's starting to speculate on what the Park
9 Service did and why they did it.

10 Q: Tell us what you observed in the area of these
11 parking spaces?

12 A: Metal barricades to prevent the public ---

13 **MS. ARMSTRONG:** Objection, Your Honor. I mean, he
14 can testify to what he's observed and the
15 location of those barricades, but not what the
16 Park Service intended by locating and placing
17 barricades.

18 **THE COURT:** I was going to reiterate what she was
19 saying, but she just said it.

20 Q: Just tell me what you've observed in this area
21 and don't get to the purpose of the barricades?

22 A: Metal barricades in proximity to previously used
23 striped parking spaces on the Beachwalker Park
24 parking lot.

25 Q: Did KDP put those there?



1 A: No, sir.

2 Q: If you drove your car in there and there were no
3 other cars in the parking lot, could you park
4 there?

5 A: I wouldn't.

6 Q: Now, if you would go to the final page of that
7 section.

8 A: Yes.

9 Q: Do you see that?

10 A: I do.

11 Q: And without telling us exactly everything on
12 that page, please do not, what does that show in
13 those details?

14 A: It shows a ---

15 Q: Just generally what does it show?

16 A: A cross section of the wall.

17 Q: Does it show the methods ---

18 **MS. ARMSTRONG:** Objection, Your Honor, leading.

19 Q: Does it show anything about methods to be used?
20 Methods and materials?

21 A: It shows certainly the materials.

22 Q: All right. And does it show the system?

23 A: Yes.

24 Q: What is that system?

25 A: Well, it's a metal steel corrugated interlocking



1 sheet pile and those are driven vertically into
2 the ground at some varying distance from the
3 escarpment or the critical line. So the work --
4 -

5 Q: Is there other support -- any support shown?

6 A: There are other supports; there are these
7 helical anchors that are driven in to better
8 hold the top of the wall and resist movement.

9 Q: Did OCRM require or anything with respect to the
10 sufficiency of the wall?

11 **MS. ARMSTRONG:** Objection, Your Honor. I think that
12 OCR -- he can't testify to what OCRM did or
13 didn't do.

14 **THE COURT:** Mr. Walker?

15 **MR. WALKER:** I think he can testify not to -- not to
16 show the truth of it. I'm trying to establish
17 whether they sought additional information.

18 **THE COURT:** You can ask that.

19 Q: Did OCRM seek additional information?

20 A: They -- they sought information through one
21 letter I remember from Tara Maddock where she
22 specifically requested ---

23 Q: Well, don't go -- don't. What did KDP and the
24 design engineer do in response?

25 A: They developed a report to demonstrate the basis



1 of design to better show the integrity of the
2 wall design.

3 Q: All right. Now, I'm going to jump back to the
4 preliminary plat that we talked about that was
5 approved August 3 of 2011. At some point, did
6 that -- what happened to that plat?

7 A: The 2011 plat?

8 Q: Yes, sir.

9 A: Well, it remained valid for a period of about
10 two years.

11 Q: What did you do then?

12 A: We sought to resubmit the plat in or around the
13 end of the two-year period.

14 Q: Now, I'd ask you to turn to KDP Exhibit 3.

15 **(Respondent's Exhibit Number 3 was introduced into the**
16 **record at this time).**

17 A: Yes, sir.

18 Q: To whom was the preliminary plat submitted this
19 go round?

20 A: To the Town of Kiawah Island's Plan -- excuse
21 me, Planning Commission.

22 Q: Were you present during its consideration?

23 A: I was.

24 Q: And what was the outcome?

25 A: The Town Planning Commission ---



1 **MS. ARMSTRONG:** Objection, Your Honor. He's getting
2 ready to give hearsay.

3 **MR. WALKER:** For him to say it was approved is not
4 hearsay. I mean, he observed it happening.

5 **THE COURT:** Yeah, I overrule that.

6 Q: What happened?

7 A: The Town of Kiawah Island Planning Commission
8 approved the preliminary plat.

9 Q: And what was the date that it approved it?

10 A: September 4th, 2013.

11 Q: Is there a drawing behind the cover letter?

12 A: Yes.

13 Q: Can you identify that?

14 A: Yes, that's the preliminary plat that was
15 approved on September 4th, 2013, and as the
16 notes would indicate, it's original creation was
17 on May 15th, 2013, and it includes a latest
18 revision date up to July 26.

19 Q: Did you review that before it was finally
20 submitted?

21 A: Yes, I did.

22 Q: Did you do anything with respect to approving
23 it?

24 A: Well, I wanted to make sure it was as consistent
25 as possible with the submitted state



1 application. So there are changes in the road
2 layout and the -- some of the bioretention areas
3 to better conform to the development plan that
4 had been submitted subsequent to the first
5 application.

6 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 3:**

7 **MR. WALKER:** Your Honor, the respondents move for the
8 admission into evidence of KDP Exhibit 3, the
9 cover letter and the preliminary plat.

10 **THE COURT:** What was the caveat we did the last one?

11 **MR. WALKER:** I think it was allowed to come in for
12 the fact of approval and the location of the
13 lots, but not for the truth of ---

14 **THE COURT:** All the other.

15 **MR. WALKER:** --- of the distances and surveying
16 information.

17 **THE COURT:** Well, yeah, all that hearsay information
18 that's in there. Any objection under those
19 grounds?

20 **MS. ARMSTRONG:** Well, I think that it's definitely
21 still hearsay, the letter of the local
22 governments. I mean, even sitting in a room
23 where somebody says something like "we approve
24 this plat," that's still hearsay. I mean, that
25 is what the definition of hearsay is, and that



1 was -- I mean, that's certainly been excluded in
2 this case, this last week about somebody
3 testifying about what they heard somebody else
4 say or do.

5 **THE COURT:** Well, he was testifying about the action
6 taken, not what he heard.

7 **MS. ARMSTRONG:** Well, that's -- that's the same
8 thing. I mean, the action taken ---

9 **THE COURT:** If I see somebody do an act and they say
10 "I approve it," but the act is approving as
11 opposed to what they said. I see that -- I
12 mean, I see both of them involve an oral
13 statement, but it also involves an act.

14 **MS. ARMSTRONG:** So to the extent that it contains
15 hearsay, we object on that ground too, although,
16 I understand the Court's other ruling and we'll
17 just ---

18 **THE COURT:** But the ---

19 **MS. ARMSTRONG:** We understand that the previous
20 ruling will be applicable here, as well.

21 **RULING OF THE COURT:**

22 **THE COURT:** Yeah, okay. All right, so it's admitted
23 with the caveat previously set forth in the --
24 what was the other exhibit, do you remember?

25 **MR. WALKER:** It was 1, Your Honor.



1 THE COURT: 1, okay.

2 MR. WALKER: KDP.

3 (Respondent's Exhibit Number 3 was admitted into the
4 record).

5 Q: Mr. Pantlik, did DHEC OCRM openly issue these
6 permits?

7 A: Yes, they did.

8 Q: And when did that occur?

9 A: It happened twice. The first day of the
10 approvals was May 8th, 2015.

11 Q: What happened to that approval?

12 A: They rescinded it a few weeks later. It became
13 apparent that there had been a misunderstanding
14 about the number of residential lots that had
15 been contained in the application, and they
16 sought to correct that by rescinding the earlier
17 approval and then reissuing the same approvals
18 on the basis of the same plans on May 28th,
19 2015.

20 (Joint Exhibit Number 6 was introduced into the record
21 at this time.)

22 Q: If we go to Exhibit 6, Joint Exhibit 6, in the
23 first part of the book, not the back part. The
24 other direction, sir.

25 A: Oh, yeah.



1 Q: No, no, to your ...

2 A: Yes.

3 Q: Is this a photocopy of the approval that we've
4 been talking about?

5 A: Yes, it starts with the general cover letter
6 describing the different permits and, of course,
7 it includes the certification in the -- the
8 Coastal Zone Certification in the back part of
9 this entire document.

10 Q: All right. Let's spend a couple minutes talking
11 about this Coastal Zone Consistency
12 Certification. There you go. In particular,
13 since we covered some of this with Mr. Joyner,
14 I'm not going to go through it every line, but
15 I do want to talk about these conditions going
16 down to condition one. What is condition one
17 dealing with?

18 A: It's dealing with the requirement to update the
19 critical line. It must be surveyed and reviewed
20 and approved 30 days prior to the initiation of
21 any construction dealing with this project. And
22 it must -- all of the work must be contained
23 above the critical line. There's no work
24 authorized in the critical area.

25 Q: Well, let me ask you about that. How close is



1 the wall at its closest point to the critical
2 area as designed?

3 A: My recollection is about five feet.

4 Q: Do you have any concerns as to whether a marine
5 contractor can install a wall in that location
6 without infringing on the critical area?

7 **MS. ARMSTRONG:** Objection, Your Honor, he's asking
8 for this witness' opinions about construction
9 activities that he doesn't have a basis for
10 forming opinion on.

11 **THE COURT:** He's asking -- it is close to it, but
12 he's asking does he have any concerns. I don't
13 know how important that is, but it's not an --
14 it's an opinion.

15 Q: Have you dealt with contractors ---

16 A: Yes.

17 Q: --- on Kiawah who have installed improvements in
18 subdivisions?

19 A: Both marine contractors and site development
20 contractors and building contractors.

21 Q: Now, with respect to installing a wall five feet
22 from the critical line without infringing the
23 critical line, what is your level of confidence
24 based on your experience and your knowledge of
25 the contractor who may be doing this?



1 **MS. ARMSTRONG:** Objection, Your Honor, he's asking a
2 question based on his knowledge and ---

3 **THE COURT:** Well, I think he can ---

4 **MS. ARMSTRONG:** --- his experience.

5 **THE COURT:** I think you are getting closer to opinion
6 now. I let the first one in, but I'll let you
7 respond to it, Mr. Walker, if you want to.

8 Q: Do you have a -- do you have any particular
9 concerns about the ability of the contractor
10 being able to install this?

11 A: No.

12 Q: Why not?

13 A: Because I understand that all of our ---

14 **MS. ARMSTRONG:** Objection, Your Honor, I just -- he's
15 getting ready to go into like more of an opinion
16 basically.

17 **MR. WALKER:** He's not -- he didn't say it's my
18 opinion. He's saying what he understands.

19 **MS. ARMSTRONG:** What he believes and understands,
20 that's an opinion. It's not facts that are
21 known to him. It's not something he's
22 perceived. It's not ---

23 **THE COURT:** I believe ---

24 **MS. ARMSTRONG:** It's based on what an ---

25 **THE COURT:** I'm going to let him testify to it and



1 then I'll decide afterwards whether we should
2 strike it, so proceed.

3 Q: What contract -- what contractor would you use
4 for this installation?

5 A: Well, we actually have a contract with a marine
6 contractor with many years experience in work
7 such as this type. Cape ---

8 Q: What's the name of that contractor?

9 A: Cape Romain.

10 Q: Have you seen their work before?

11 A: I have.

12 Q: Do you believe they can do this work without
13 infringing into the critical area?

14 **MS. ARMSTRONG:** Objection, Your Honor. It means he's
15 asking for his opinion about how the contractor
16 can do their work. I mean, they can bring the
17 contractor in here to talk about exactly how
18 they would do the work, but to try and shoehorn
19 testimony in about how construction activities
20 are going to proceed through a lay witness
21 that's not been qualified is -- I mean, it's ---

22 **THE COURT:** I think Mr. Walker's indicating he's
23 about to ask another question.

24 **MR. WALKER:** I'll ask it a different way.

25 Q: Why are you not concerned?



1 A: Because ---

2 **MS. ARMSTRONG:** Objection, Your Honor.

3 **MR. WALKER:** No, he can still -- why are you not
4 concerned that ---

5 **THE COURT:** I'll overrule that one. If he testifies
6 to hearsay or opinion, I'll strike it.

7 Q: Why are you not concerned about this
8 installation this close to the critical line?

9 A: Because all of the contractors that I have ever
10 witnessed hire professional land surveyors to
11 provide what they call construction staking. So
12 it's not just the contractor eyeballing the
13 plans and thinking that something goes in a
14 certain location. They do it precisely with the
15 use of land surveyors who interpret the plans
16 and place the points as they are shown on the
17 plans.

18 Q: What instrument would be used to place the steel
19 into the ground?

20 A: A vibrating hammer and along with I guess it's
21 called a jig system where you set up precisely
22 where the sheets go and you are able to control
23 them precisely as they're driven.

24 Q: Now, let's go to number two. Does that deal
25 with the condition that there has to be an in-



1 ground sheet pile wall?

2 A: Yes, it does.

3 Q: What is the timing of that in relation to the
4 other construction?

5 A: This work must be accomplished first before
6 doing any of the other authorized improvements.

7 Q: Now, let's go to the next page, to three. I
8 think we've covered that. Number four, what is
9 four?

10 A: It deals with conformance to the low impact
11 development practices that are described in the
12 Development Agreement.

13 Q: And what is your intent with respect to doing
14 that?

15 A: Well, specifically, in the related NPDES permit,
16 there is a limitation of the amount of
17 impervious coverage that each of the lots have
18 that are enumerated in the NPDES permit.

19 Q: And what about the low impact development
20 practices, will those be implemented?

21 A: Yes, I think that's reinforcing the aspect that
22 I spoke of earlier where stormwater from the
23 home sites are not -- is not to leave the home
24 site.

25 Q: We'll have another witness talk to five and six,



1 so we'll skip over those, and we'll go to seven.
2 What does seven refer to?

3 A: Seven is linking again back to the Development
4 Agreement referencing the conservation easement
5 that's required to be placed on those properties
6 that are highland in the Development Agreement
7 context that are unimpacted.

8 Q: Did you have a question about this condition?

9 A: I did.

10 Q: Why?

11 A: Because of the footnote that is referenced in
12 this condition and how it -- as it says, the
13 acreage was derived from a letter and having
14 reviewed that letter, it was evident that the
15 information requested by the Department of
16 Thomas and Hutton dealt with phase one only,
17 whereas the context to the Development Agreement
18 requirements contemplated the entirety of the
19 development, the entire 50 lot subdivision.

20 Q: And what about the entirety of Captain Sam's?

21 A: In what ---

22 Q: Under the Development Agreement, was that
23 considered?

24 A: Not in the acreage that was derived from this
25 letter.



1 Q: My question deals with the scope of the
2 conservation easement in the Development
3 Agreement. Is it limited in the amount of
4 acreage?

5 A: It's not capped. It's -- it requires the
6 placement of a conservation easement for all
7 unused land above the mean high water line
8 that's not used for other uses, such as
9 residential lots and roads and community docks.

10 Q: I'm going to change subjects completely right
11 now, but it's only a couple of questions. Are
12 you familiar with the inlet relocation that went
13 on in 2015?

14 A: Yes.

15 Q: Did you walk the beach after that?

16 A: I did.

17 Q: And did you go to the point?

18 A: Oh, yes.

19 Q: How long after the inlet relocation did you walk
20 the beach down to the point?

21 A: It would have been within a week.

22 Q: And what did you observe?

23 A: That there -- and as I knew from the outset,
24 that the actual excavation of the channel where
25 the new inlet was created cut through high



1 ground to the point that it cut through not only
2 areas of dune, but where there had been wax
3 myrtle vegetation established and on the edges
4 of the channel there was evidence of where wax
5 myrtles had been recently inundated with
6 saltwater immediately after the channel was
7 relocated.

8 Q: Out of curiosity, before the inlet relocation in
9 June of 2015, had you ever observed bottlenose
10 dolphin strand feeding down on the point?

11 A: Yes, I had seen that.

12 Q: Where was the location in relation to where the
13 cut was? Was it on the Seabrook side of the new
14 cut or on the Kiawah side of the new cut?

15 A: Well, it -- I'm sorry, but to better understand,
16 you know, the channel itself moved about 3,000
17 feet and so I would have observed the strand
18 feeding in the vicinity of where the inlet was
19 located prior to the relocation, so that would
20 have been I guess closer to Seabrook at the
21 time.

22 Q: We're going to throw up 24.

23 **(Respondent's Exhibit Number 24 was introduced into**
24 **the record at this time.)**

25 Q: So with your finger can you -- this is what Dr.



1 Kana talked about, so where is this location
2 that you're talking about?

3 A: (Indicating.)

4 Q: Okay. Was that affected by the inlet
5 relocation?

6 A: I heard testimony to that effect.

7 Q: No, do not -- don't testify about your
8 testimony. Was it affected by the inlet
9 relocation?

10 **MS. ARMSTRONG:** Objection, Your Honor, I'm not sure
11 this witness is qualified to testify about
12 whether a dolphin habitat was affected by an
13 inlet relocation.

14 **THE COURT:** I think he's testifying to his
15 observations.

16 Q: As an observation of this area of the beach, was
17 it all changed based on what you saw as a result
18 of this inlet relocation project?

19 A: It's my experience that the dolphins ---

20 **MS. ARMSTRONG:** Objection, Your Honor.

21 **THE COURT:** You can listen to his question one more
22 time.

23 A: Would you remind repeating it? I'm sorry.

24 Q: It's all right. Did the inlet relocation
25 project change the area that you've marked here



1 that you identified as an area where you have
2 previously, before the inlet relocation, saw
3 dolphins feeding?

4 A: Yes.

5 Q: How was it changed?

6 A: Well, it obviously, blocks the tidal currents,
7 that's the purpose of the project at the west
8 end is to stop the tidal flow and, of course,
9 redirect it into the new channel.

10 Q: All right.

11 **(Respondent's Exhibit Number 35 was introduced into**
12 **the record at this time.)**

13 **MR. WALKER:** Could we have KDP Exhibit 35, which is
14 in evidence, put on the screen, please?

15 Q: Would you please show on Respondent's Exhibit
16 35, with your finger, the approximate
17 termination of wall, the western terminus of the
18 wall?

19 A: (Indicating.)

20 Q: Have you drawn that? And where is it in
21 relation to the large creek opposite ---

22 A: It's -- if you more or less project a line
23 that's on the western edge of the creek to the
24 north, it is more or less in that location.

25 Q: Will any part of the wall be west of that? I



1 know it's a dumb lawyer's question, but there
2 have been a lot of fingers on the screen.

3 A: No. I might refine slightly the location, but,
4 generally, in that location I can best describe
5 it perhaps if -- if one notices this marsh area
6 through here, there's a divergence of this mean
7 high water line versus the critical line and
8 there's a long held practice by OCRM, you can
9 armor high ground but you can't armor the marsh
10 as such. So that's always sort of the practical
11 limit of where an erosional control device can
12 be permitted.

13 Q: Mr. Pantlik, because when you finish your
14 markings on this it's going to disappear, for
15 the record, where is the relation of the
16 terminus? Where is the end of the western end
17 of the wall in relation to the large creek
18 that's coming into the Kiawah River from the
19 opposite side?

20 A: It's in line with the western edge of the creek.

21 Q: On the opposite side?

22 A: On the opposite side.

23 **THE COURT:** And true to form, the line is gone.

24 **MR. WALKER:** There we go.

25 Q: Did you walk the beach soon after Hurricane



1 Matthew?

2 A: Yes, I did.

3 **MR. WALKER:** Could we have Exhibit -- KDP Exhibit 33,
4 please?

5 **(Respondent's Exhibit Number 33 was introduced into**
6 **the record at this time).**

7 Q: All right. KDP -- can you identify KDP Exhibit
8 33?

9 A: I believe these are shots taken by a drone
10 device by the Town of Kiawah Island.

11 Q: Does this photograph fairly and accurately
12 represent, as best you can tell, the condition
13 of the beach shortly after Hurricane Matthew?

14 A: Yes.

15 Q: Does it show the erosion as being more
16 pronounced in one part of Captain Sam's as
17 opposed to another part?

18 A: I can't say.

19 Q: All right. Fair enough.

20 **MR. WALKER:** Are there other photos too? See, I
21 think there may be more than one photograph for
22 33.

23 Q: How about this photograph, does that, to the
24 best of your knowledge, based on your visit to
25 the beach fairly and accurately represent the



1 beach after Hurricane Matthew?

2 A: Yes, it does.

3 Q: And that's number two of Exhibit 33. Does that
4 show the neck?

5 A: It does, yes.

6 **MR. WALKER:** And if we could have the last one,
7 please.

8 Q: All right. Number three, how about that, where
9 is that taken?

10 A: Well, in the foreground, you can see a
11 boardwalk. That is the -- at the lower end of
12 the image, bottom end, that's the boardwalk that
13 is part of the Beachwalker Park. Their
14 boardwalk stops a few feet short of the dunes,
15 so there's sort of a pathway through the dunes
16 that is used.

17 Q: What is the looks like path above that, Mr.
18 Pantlik?

19 A: Yes, that corresponds to the easement that we
20 have granted the Town of Kiawah Island for an
21 emergency beach access.

22 Q: And where does that access start?

23 A: It starts at the southern end of the parking
24 area, southeast corner of the parking area of
25 the Beachwalker Park.



1 Q: Has there been any change in the location of
2 that first part of the beach access in recent
3 years?

4 A: Yeah, it's sort of off the page, but similar to
5 some of the paved parking spaces, the original
6 trail became too close to the tall escarpment
7 for the Town vehicles to safely traverse it.
8 Thus, it was moved away from that shoreline to
9 the east.

10 Q: And is the steel -- in-ground steel sheet pile
11 wall in that location, approximately in that
12 location along the shore?

13 A: Absolutely.

14 Q: I'm going to ask you about the Town of Kiawah
15 Island. Are you familiar with the ordinances of
16 the Town of Kiawah Island?

17 A: Yes, and with this development obviously being
18 in such close proximity to the regulated beach,
19 we had to be not only familiar with the
20 subdivision ordinance and the normal subdivision
21 process, but also there's a separate section
22 beach management in the Town Code.

23 Q: Would you please turn to KDP Exhibit 21.

24 **(Respondent's Exhibit Number 21 was introduced into**
25 **the record at this time.)**



1 Q: I'd ask you to thumb through that to see if you
2 can identify it.

3 A: Yeah, it appears to be a complete section of
4 Article XVI of the Municipal Code of the Town.

5 Q: And generally, what does Article XVI of the
6 Municipal Code speak to?

7 A: Management of the beach.

8 Q: Does it speak to habitat?

9 A: I mean ---

10 Q: I'm not asking you to quote a chapter and verse.

11 A: Yes, it speaks to critical habitats in the dune
12 beach system.

13 Q: Does it speak to lighting, mounted lighting?

14 A: Yes, that's the -- one of the first chapters.
15 By controlling the lighting so as to not blind
16 the newly hatched sea turtles from becoming
17 disoriented.

18 Q: Are there other ordinances in there that deal
19 with behavior on the beach?

20 A: Yes, traffic is strictly controlled for Town
21 vehicles. A property owner or member of the
22 public is not allowed to drive a vehicle on the
23 beach. There are statements of -- dune
24 restoration is an encouraged strategy as part of
25 the beach management. There's a requirement to



1 utilize beach walkovers so that there's not a
2 degradation of the dune, so that there are ---

3 **MS. ARMSTRONG:** Your Honor, I'm going to have object
4 now. He went from generally stating what is in
5 the ordinance to starting to talk about what
6 specific restrictions are in the ordinance that
7 he's said that that's what it is. It's not even
8 -- it hasn't been moved to admit.

9 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 21:**

10 **MR. WALKER:** I'll move ---

11 **MS. ARMSTRONG:** And he's reading from it.

12 **MR. WALKER:** --- to enter into evidence the chapter
13 from the Kiawah Town Code identified as Article
14 XVI, Beach Management.

15 **THE COURT:** Is that Respondent's Exhibit 21?

16 **MR. WALKER:** Yes, sir.

17 **THE COURT:** Any objection?

18 **MS. ARMSTRONG:** Yes, Your Honor, the petitioner
19 objects. It's hearsay; it's not authenticated.
20 We don't -- I can't tell just from this that
21 that's actually what it is or would in any way
22 purport to do so either, and so obviously it's
23 hearsay. But to the extent that it is an
24 enacted law, we don't think it's even necessary
25 or ---



1 **THE COURT:** Well, you can ---

2 **MS. ARMSTRONG:** --- to be admitted into evidence. I
3 mean, if it's dually enacted, it's just like
4 any law The Court could rely on in making its
5 decision, although these particular provisions
6 don't even apply to this case because this is --
7 this Court's not reviewing to make -- ensure
8 that the project's consistent with local zoning,
9 so it's entirely irrelevant to the issues. It's
10 not part of your inquiry and the Court can take
11 judicial notice to the extent that it would be
12 relevant because it's to dually enacted -- if it
13 is dually enacted, then the Court can certainly
14 find that very easily.

15 **THE COURT:** Won't that make this is a little bit
16 redundant if indeed this is the law, I can take
17 judicial notice of it and then I would have them
18 submit the -- either submit the law to me or me
19 go find it, whereas this is -- he's stating
20 right now that this is the law?

21 **MS. ARMSTRONG:** I think coming into evidence and
22 having it be part of the record ---

23 **THE COURT:** Well, judicial notice is record. I mean,
24 when you take judicial notice, it becomes part
25 of the record. So I mean, if it's ---



1 **MS. ARMSTRONG:** Well, then I guess then I should
2 retract that, but I don't think the Court needs
3 to take judicial notice of it. I mean, if it's
4 a law, it's a law. I mean, we're not
5 introducing the Coastal Zone Management Act into
6 the record. We're not introducing the Coastal
7 Management Program policies into the record.
8 I'm not sure why this should be elevated and
9 given some special treatment or standard and
10 come into the record as evidence, whether by
11 judicial notice or not.

12 **THE COURT:** All right. Mr. Walker?

13 **MR. WALKER:** Well, first, it's been authenticated by
14 the witness as being the current ordinances, so
15 we think it's authenticated. And we'd also
16 point out the local ordinances, I believe, are
17 treated a little differently from statutes and
18 regulations and they need to be put in by a
19 witness, I think, because you can't just -- and
20 it may be a hangover from -- or a leftover from
21 the non-on-line days, but my recollection is
22 they have to come in through a witness. The
23 relevance is that there has been the assertion
24 at different times that sea turtles are going to
25 be harmed, then it was a condition in the



1 certification that there be no pole lighting.
2 There's been an assertion that people who live
3 here might run off dolphins and do different
4 things like that. These ordinances, the Town
5 has ordinances that govern conduct on the beach
6 and this is pertinent to showing that many of
7 the things that have been complained about are
8 covered by Town ordinances, like 16-8-10,
9 wildlife and marine life. In addition to any
10 other applicable state or federal laws, no
11 person shall physically harm, harass, or
12 otherwise disturb any sea turtles, marine
13 mammals, any sea bird, beach or stranded
14 turtles, whales, or dolphins, that sort of
15 thing. So there are regulations out there and
16 if they're -- excuse me, local ordinances that
17 govern the conduct, then that should end the
18 inquiry about bad behavior.

19 **THE COURT:** Well, if it ends the inquiry, it's a
20 level of prohibition.

21 **MR. WALKER:** Correct. No, they would have to be
22 enforced, that's for sure.

23 **MS. ARMSTRONG:** Your Honor, I would disagree that
24 this -- this witness cannot -- that's not what
25 the authentication rule states in 901. I mean,



1 you can't just say yeah, I've looked at this
2 ordinance and this is the ordinance, and that
3 comes in. That's -- that's ---

4 **THE COURT:** Well, I tell you what I'm going to do ---

5 **MS. ARMSTRONG:** --- there has to be testimony from a
6 witness that can say yes, I mean, especially
7 when it comes to a law like this, and usually
8 the Town -- the Town can certainly do that
9 because it's their ordinance.

10 **RULING OF THE COURT:**

11 **THE COURT:** Well, I'm going to allow -- I would allow
12 any lawyer to submit the proposed ordinances in
13 their brief. I allow lawyers to submit stuff
14 like that all the time, so what's going to -- my
15 ruling is going to be I'll sustain your
16 objection, but I'll allow Mr. Walker to submit
17 this article on his own. I mean, as a reference
18 to what the law is.

19 **MR. WALKER:** Thank you, Your Honor.

20 **THE COURT:** You can just do that with your proposed
21 order.

22 **Q:** Mr. Pantlik, in your capacity as Development
23 Director, do you also keep up to some extent
24 with FEMA flood maps?

25 **A:** I do.



1 Q: Why?

2 A: Well, these have a -- these maps that are in
3 this state that promulgated or administered
4 through South Carolina DNR as the statewide
5 flood plain manager, they end up being adopted
6 by local governments and they very much govern
7 the details of where any sort of built
8 improvement or what elevation any sort of built
9 improvement must be made. And so they ---

10 Q: And does that come within the range of what you
11 do in your job?

12 A: Yes, of course.

13 Q: There's been some testimony about the COBRA
14 zone, is Captain Sam's in the COBRA zone?

15 A: Yes.

16 Q: What about FEMA flood, do the FEMA flood maps
17 include Captain Sam's?

18 A: They do.

19 Q: And today, what is that zone or is there more
20 than one zone today?

21 A: There -- the entirety of the spit is in the so-
22 called velocity zone, which deals with not only
23 ---

24 **MS. ARMSTRONG:** Objection, Your Honor, he's
25 testifying -- this is hearsay. He's testifying



1 what something is based on -- he's obviously
2 looked at something, talked to somebody,
3 somebody told him, or he saw it written down
4 somewhere, that's hearsay.

5 **MR. WALKER:** He has to know this as the development
6 manager, what the maps are. It's part of his
7 job and he is telling us what it is. It's in
8 the V zone. All of it's in the V zone. I don't
9 see where that's hearsay or expert testimony.
10 It's a fact that it's in the V zone and he knows
11 it.

12 **MR. WALKER:** It's a fact that they have to prove and
13 they can't prove it by a witness that doesn't
14 have knowledge. That's when -- that's why these
15 rules exist so that we have an opportunity to
16 cross-examine and determine whether that's true.
17 Now, if he wants to prove a fact, then he can
18 try and prove the fact, but just because Mr.
19 Pantlik has to know for his job what that is
20 doesn't mean that that information automatically
21 comes in because it's still hearsay.

22 **THE COURT:** Where is that information available?
23 Where does it come from?

24 **Q:** Where is that information available, Mr.
25 Pantlik?



1 A: It's on FEMA -- FEMA's website. It is likely
2 available through DNR and there are other
3 publicly available GIS applications that -- the
4 City of Charleston for one, actually, you can
5 turn on the layers that depict the current
6 adopted flood zones and also the preliminary
7 maps that have recently been published by FEMA.

8 Q: Are those flood zones, have they been adopted or
9 effectuated by the Town of Kiawah Island?

10 A: Not the ones that were published in September of
11 2016.

12 Q: Before that?

13 A: Oh, yes, the Town's flood ordinance would
14 prescribe strict adherence to building to the
15 elevations that are shown on the adopted flood
16 maps from -- published by FEMA.

17 Q: Are you familiar with those in the work you do
18 everyday?

19 A: Yes.

20 Q: Now, you mentioned something about September
21 2016. What happened in September 2016? What
22 fact happened?

23 A: FEMA made available by both access through the
24 web and through a GIS digital download maps that
25 are applicable to all of Charleston County,



1 including Kiawah Island.

2 **MR. WALKER:** Could we have Exhibit 15, please? KDP
3 Exhibit 15.

4 **(Respondent's Exhibit Number 15 was introduced into**
5 **the record at this time.)**

6 **MS. ARMSTRONG:** Your Honor, I think that Mr. Walker's
7 getting ready to show hearsay. That's exactly
8 what's up on here right now. He can certainly
9 testify he's got knowledge that FEMA published
10 maps, but he can't say what the maps say or show
11 and that's exactly what's up on here. I mean,
12 there's no witness to cross-examine on these
13 maps, who created them, how they were created,
14 why they made these determinations, or whether
15 they were authenticated. I mean, again, this is
16 not -- there's just nothing -- because it's
17 hearsay, it's not authenticated.

18 **THE COURT:** Mr. Walker?

19 **MR. WALKER:** Well, I will go into that a little more
20 with Mr. Pantlik.

21 **THE COURT:** Okay.

22 **MS. ARMSTRONG:** Can we take down the map until we've
23 actually established that?

24 **THE COURT:** That's not going to affect me. This is
25 not like a jury. I have to look at the map to



1 make rulings anyway.

2 **MS. ARMSTRONG:** I guess what's good for the goose
3 doesn't seem like it's good for the gander
4 because I've ---

5 **THE COURT:** Well, wait a second. I want you to
6 explain that one because that almost is
7 contemptuous, but if you are accusing me of not
8 being fair. I don't think I've ever had you put
9 an exhibit up and me say I didn't want to see it
10 because it was going to affect my ruling.

11 **MS. ARMSTRONG:** You're correct, Your Honor, you did
12 not say that, but counsel for KDP asked that it
13 be removed and the Court made us take it down
14 from -- not show it on the screen, not show it
15 to the witness.

16 **THE COURT:** Well, I certainly don't remember doing
17 that because it doesn't affect me one way or the
18 other. Judges have to make rulings anyway.

19 **MS. WHITE:** I specifically remember, Your Honor, I
20 apologize for interrupting. It was a witness of
21 mine. I can't remember which witness, but Mr.
22 Gressette objected and asked that it be taken
23 down and it was.

24 **THE COURT:** Well, was it taken down because I wasn't
25 going to admit it?



1 MS. WHITE: Well, you didn't ---

2 THE COURT: Or was it taken down ---

3 MS. WHITE: You specifically ---

4 THE COURT: No, I want to hear.

5 MR. GRESSETTE: Your Honor, I believe that she's
6 referencing my request that an exhibit not be
7 presented because I objected that it was
8 leading, that the witness didn't have
9 independent knowledge of it.

10 THE COURT: Oh, that was regarding a witness,
11 affecting the witness, not ---

12 MR. GRESSETTE: Yes, Your Honor.

13 THE COURT: Not me.

14 MS. ARMSTRONG: Yeah, not ...

15 MS. WHITE: Right, we're -- I don't think that's what
16 we ---

17 THE COURT: Are you asking that it be taken down ---

18 MS. ARMSTRONG: Yes.

19 MS. WHITE: Just until it's -- he said he was going
20 to lay further foundation.

21 THE COURT: Oh, well, then I'll go along with that
22 goose, but ---

23 MS. ARMSTRONG: Well, it just seemed like it's the
24 same thing, like you're letting a witness
25 testify about what's on a screen without ---



1 **THE COURT:** I took it to mean you didn't want me to
2 see it?

3 **MS. ARMSTRONG:** No, no, no, I didn't mean that. I
4 meant ---

5 **THE COURT:** Okay. I get that now.

6 **MS. ARMSTRONG:** Okay.

7 **THE COURT:** All right. Let's move on.

8 **Q:** As part of your job as development director on
9 Kiawah, do you try to keep up with such things
10 as building regulations?

11 **A:** Yes.

12 **Q:** Standards?

13 **A:** Yes, of course.

14 **Q:** And various codes?

15 **A:** Of course.

16 **Q:** Do the things that you keep up with include
17 flood maps?

18 **A:** They would.

19 **Q:** When you in the course of your duties are
20 developing a piece of property and you're doing
21 a layout, do you consult the flood maps?

22 **A:** Yes.

23 **Q:** Is that something you do in the ordinary course?

24 **A:** Yes. Oftentimes, they're shown on the plats and
25 they have to be considered with any sort of



1 where electrical supply is made and certainly
2 wherever -- what elevation the homes -- the
3 resulting homes have to be built or commercial
4 structures.

5 Q: And what has been the source of the information
6 that you use to determine the flood zones?

7 A: Just as the Town of Kiawah Island utilizes the
8 FEMA maps, the flood insurance program mandates
9 use of those maps as the guiding tool to
10 determine what zone a particular property's in
11 and what the required elevation is.

12 Q: So you're saying that the -- what was it that
13 refers -- requires those maps, I'm sorry?

14 A: The Town of Kiawah through their flood ordinance
15 or any local jurisdiction, if they want to be or
16 have -- be in a community that has the national
17 flood insurance program, they have to have an
18 ordinance adopted adopting the FEMA maps that
19 are used in conjunction with administering the
20 National Flood Insurance Program.

21 Q: And are we talking about those same FEMA maps
22 that are imposed by ordinance?

23 A: Yes.

24 Q: Do you go to the same place the Town goes?

25 A: Yes. As a matter of fact, I've had discussions



1 with the Town's Flood Plain Manager, Bruce
2 Spicher, along with the State Flood Plain
3 Manager, Maria Cox, who works with the South
4 Carolina DNR, about the new preliminary maps.

5 Q: And who released the new preliminary maps?

6 A: FEMA, I guess you could say slash DNR. DNR is
7 the -- is the official source for the maps that
8 were produced. They were the ones that hired an
9 outside consultant engineering firm to actually
10 produce the maps that became publicly available
11 in of September 2016.

12 Q: When you were having your conversations with the
13 building inspector about preliminary maps, were
14 you referring to the same or different maps?

15 A: I was referring to the same September 2016 maps.

16 Q: And if you look at KDP 15 ---

17 **THE COURT:** Wait a second.

18 **MR. WALKER:** Before you put it on the screen.

19 **THE COURT:** Yeah. Well, do you object to him looking
20 at it at this point?

21 **MS. ARMSTRONG:** I would like ---

22 **THE COURT:** Because he's got to identify what he's
23 going to talk about at this point. Go ahead.

24 **(Respondent's Exhibit Number 15 was introduced into**
25 **the record at this time.)**



1 Q: Is 15 the map that you're referring to, the
2 preliminary map?

3 A: Yes.

4 Q: Have you seen any other purported document that
5 -- or any other document that purports to set
6 forth the proposed flood zones for Captain Sam's
7 and the surrounding area other than this one?

8 A: No, there is a supporting document that -- that
9 is also published called the flood study, which
10 provides the basis for the map, but the map is
11 the sole determiner as to what flood zone and
12 required elevation is -- will ultimately be
13 required by FEMA, DNR, and the Town.

14 Q: And can you verify under oath that that is a
15 true and accurate copy of that preliminary map?

16 A: Yes.

17 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 15:**

18 **MR. WALKER:** We would offer it into evidence.

19 **MS. ARMSTRONG:** Objection, Your Honor, I mean, I
20 think I want to back up with the last statement
21 about verify that it's a true and accurate copy.
22 This Court in the Court's Order for scheduling
23 the hearing required that we provide originals.
24 And now if there was an original of the FEMA map
25 that we could verify and tell on its face that



1 it's ---

2 **THE COURT:** Well, you're never going to get the
3 original of a FEMA ---

4 **MS. ARMSTRONG:** Well, they can certify it and they
5 can ---

6 **THE COURT:** Oh, certified, that's different.

7 **MS. ARMSTRONG:** Sure. Yeah.

8 **THE COURT:** You said original.

9 **MS. ARMSTRONG:** Well ---

10 **THE COURT:** Certified copy.

11 **MS. ARMSTRONG:** Yeah, a certified copy, which we
12 don't have. I mean, that's -- there isn't --
13 he's not -- I don't -- he's not a witness with
14 knowledge able to authenticate this kind of a
15 document and it contains hearsay statements,
16 because this witness didn't create the map; he
17 wasn't involved in the creation of the map; he
18 doesn't know how it was created. I mean, we
19 went through this with the surveyor having to
20 explain how they created the map. We went
21 through this with Celie Dailey and Dr. Porcher
22 about how documents were created and when things
23 aren't created by a witness, they haven't been
24 allowed to just get it into evidence. That's --
25 it's just -- it doesn't -- I don't see how they



1 can get around the two -- the authentication and
2 the hearsay rule.

3 **MR. WALKER:** I believe we've met the authentication
4 rule.

5 **THE COURT:** Well, let me go to it.

6 **MR. WALKER:** And ---

7 **THE COURT:** It's 901.

8 **MR. GRESSETTE:** 902(5).

9 **MR. WALKER:** 902(5). Books, pamphlets, or other
10 publications purporting to be issued by public
11 authority. This is exactly within that
12 category.

13 **THE COURT:** That's interesting phraseology. It says
14 publications purporting to be issued by a public
15 policy. Now, y'all have got this thing off the
16 screen. I don't know what you want to do about
17 him, but I need you to put it back up on the
18 screen if I'm going to make a ruling.

19 **MS. ARMSTRONG:** Sure.

20 **THE COURT:** All right.

21 **Q:** And Mr. Pantlik, would you direct the Court to
22 the place where -- of the purported issuer?

23 **A:** (Indicating.)

24 **MR. WALKER:** Could you focus in on that.

25 **THE COURT:** All right. That appears to be



1 purporting. Now ---

2 **MS. ARMSTRONG:** There's got to be authentication for
3 it.

4 **THE COURT:** So this still ain't proof.

5 **MS. ARMSTRONG:** And then we've got a hearsay.

6 **THE COURT:** All right. So how do we get to the
7 hearsay?

8 **MR. WALKER:** Well, it's authenticated and it is being
9 shown to show that -- not that the maps are
10 actually going to be changed, but we're on
11 notice that they may be changed to these flood
12 zone designations. Whether they do it, we don't
13 know.

14 **THE COURT:** So they're not offered for the truth of
15 the matter asserted, they're offered for a
16 notice to you that they may be changed, that the
17 flood zones may be changed?

18 **MR. WALKER:** Correct. Because they're not final and
19 it's notice to us that it may be changed to a
20 different category.

21 **THE COURT:** And that -- the potential of an
22 occurrence is relevant how?

23 **MR. WALKER:** Well, they keep -- we keep hearing about
24 the COBRA zone and COBRA this and COBRA that.
25 And it just so happens that FEMA is about to



1 reclassify a large portion of Captain Sam's Spit
2 in the same flood category as Seabrook and
3 Kiawah, and we think that that's pertinent.
4 We've heard all about the high risk and this and
5 that and here's an instance where a federal
6 agency that's charged with this responsibility
7 has a different opinion from some of the people
8 we've heard from in this courtroom and we're on
9 notice that it may be changed to a different
10 category.

11 **THE COURT:** When would that change occur?

12 Q: When would that change occur, Mr. Pantlik? Do
13 you know the exact date?

14 A: No, and I -- I don't believe that Maria Cox, the
15 state flood plain manager, has determined that
16 date. The next notice that we understand that
17 we could receive is the start of an appeal
18 period prior to the final adoption, but that
19 date has not been communicated as I understand
20 it to the developer.

21 **THE COURT:** I'm just not sure the probative weight of
22 something that may or may not occur.

23 Q: Is it under consideration?

24 A: Definitely.

25 **THE COURT:** My decision in this case is under



1 consideration.

2 **MR. WALKER:** Well, Your Honor, not knowing what
3 you're going to do, we would like to make a
4 proffer of his testimony ---

5 **THE COURT:** Yeah.

6 **MR. WALKER:** --- and you can reject it in the end if
7 you find it's not admissible, and you reject it.
8 But I've got to make a proffer for the record
9 obviously.

10 **THE COURT:** Okay. That's fine.

11 Q: All right.

12 **MR. WALKER:** Now, could you enlarge, please, 15,
13 Dave, to Captain Sam's Spit if you see it there?

14 **THE COURT:** Counsel's ---

15 **MR. WALKER:** Mr. Gressette was rightly showing me
16 subsection (8) of the hearsay rule dealing with
17 public records and reports.

18 **THE COURT:** Give me that again.

19 **MR. WALKER:** It's 803(8). And we would say this sets
20 forth the activities of the agency since they're
21 charged with doing the flood map.

22 **THE COURT:** All right. Ms. Armstrong?

23 **MS. ARMSTRONG:** I mean, think of it, part of the big
24 problem is that these -- this is not effective
25 and so it's not what's in place right now and we



1 think that it's prejudicial to imply that the
2 zoning, flood zones are going to change. We
3 don't know that they are. I don't -- we don't
4 even know that that's -- I mean, it may happen,
5 it may not happen.

6 **RULING OF THE COURT:**

7 **THE COURT:** All right. Here's going to be my ruling.
8 Y'all can both respond to it if you want, but
9 it's authentic; it's admissible under the public
10 records exception 803(8), but it is not to me
11 probative as to this case since it may or may
12 not occur and that to me doesn't at this point
13 in time carry any proof.

14 **MS. ARMSTRONG:** And responding to that, I would ---

15 **THE COURT:** Go ahead.

16 **MS. ARMSTRONG:** --- I would just say we would agree -
17 - I would agree with what you just that you
18 believe that it's not probative and we would say
19 that it's not relevant and it shouldn't come
20 into evidence.

21 **THE COURT:** Well, probative and relevant are the same
22 thing right now.

23 **MS. ARMSTRONG:** Right, so -- so you don't let in
24 evidence ---

25 **THE COURT:** --- it's not relevant because it's not



1 probative.

2 **MS. ARMSTRONG:** Right, which means you don't let it
3 into evidence.

4 **THE COURT:** Yeah.

5 **MS. ARMSTRONG:** Okay.

6 **THE COURT:** Okay. All right.

7 **MR. WALKER:** Well, we would say it makes more likely
8 than not that ---

9 **THE COURT:** Well, you can proffer it now ---

10 **MR. WALKER:** --- that it's the proper place, that it
11 has something to do. So I'll do with the ---

12 **THE COURT:** Continue down your proffer.

13 **MR. WALKER:** yeah.

14 **THE COURT:** But I just want you to know my ruling.

15 **MR. WALKER:** Understand.

16 **PROFFERED TESTIMONY:**

17 **Q:** So Mr. Pantlik, what is the proposed change or
18 at least the change reflected on the new
19 temporary flood maps or the proposed flood maps
20 for Captain Sam's? Is there a change?

21 **A:** Yes, there's a fairly -- a very significant
22 change in terms of the distinguishment between
23 so-called A zone and a B zone, velocity zone.
24 Whereas all of the residential lots on Captain
25 Sam's are in a velocity zone under the current



1 mapping, this new mapping, if adopted, would see
2 27 of the residential lots become in the A zone,
3 which is a typical rating for most of Charleston
4 County where there is some amount of flood
5 hazard, but not as great as that -- those areas
6 that are in the V zone.

7 Q: Now, this map is gray -- different, it's 50
8 shades of gray, but can we ---

9 **THE COURT:** Maybe not that many.

10 Q: Not nearly as sexy, but can you -- did you
11 attempt to color the A zone so that we can see
12 -- put in context where this zone would be under
13 the new map in relation to other areas shown
14 here? And I'm going to turn on Exhibit 16, turn
15 to Exhibit 16.

16 **(Respondent's Exhibit Number 16 was introduced into**
17 **the record at this time.)**

18 Q: Did you prepare Exhibit 16?

19 A: I did not, but under my direction it was done by
20 Thomas and Hutton.

21 Q: Does it reflect the zones as shown in the map
22 that we were just looking at, the proposed
23 zones?

24 A: Yes.

25 Q: And what would be the yellow color?



1 A: Those would be the zones that are mapped at some
2 form of velocity zone or V zone. There are
3 varying heights, but the yellow or the lighter
4 color is those areas that are on the preliminary
5 map shown to be in the velocity zone.

6 Q: What about the dark red adjacent to that, what
7 zone is that?

8 A: Those are areas that are subject to a 100 year
9 flood event, but they're not subject to the more
10 hazardous rating of a V zone.

11 Q: Are there other areas, residential settled
12 areas, that have the same designation that we
13 can see on this map?

14 A: Well, of course, anywhere you see the red as it
15 sort of trails off the page going to the
16 northeast, you can start to see the Duneside
17 Villas, which are actually in the brown color up
18 here (indicating).

19 Q: And how about on the Seabrook side?

20 A: All of this Marshgate subdivision area are ---

21 Q: What about at Cassique?

22 A: These are all developed lots that are in
23 Cassique.

24 Q: Do you consider the proposed map to be
25 significant in terms of the suitability of this



1 area?

2 A: I do. I have, over my 28 years, seen these
3 maps; I've seen how they've changed; I've
4 reviewed the flood studies that buttress their
5 findings, and I know that the latest maps that
6 are currently adopted go back to 2004 and the
7 underlying topographic information that were
8 used to develop those maps were based on a broad
9 USGS map that dated back to 1972. And there's
10 actually a reprint of a portion of that USGS map
11 in the stormwater report. That map showed the
12 spit to be at below elevation five and we know
13 that the spit is much higher than that. These
14 latest maps were developed with the state taken
15 so-called LIDAR data, topographic data, the
16 state acquired in 2009 and it is far more
17 accurate than the sort of rudimentary look that
18 was used in the prior flood studies.

19 Q: And speaking of elevation, you mentioned ---

20 **THE COURT:** Now, are you through your proffer or are
21 you still in the proffer?

22 **MR. WALKER:** Yeah, that concludes the proffer, Your
23 Honor.

24 **PROFFERED TESTIMONY CONCLUDED:**

25 **THE COURT:** Okay.



1 **MR. WALKER:** And we do think it's probative of the
2 issue of -- or at least responsive to the
3 argument that it shouldn't be developed if an
4 agency even has it under consideration, whether
5 it changes it or not, the fact that it has it
6 under consideration I think is probative and
7 responsive to the petitioner's argument that
8 this property should not be developed, even if
9 it's not final.

10 **THE COURT:** I have to disagree with you on that right
11 now. Thank you.

12 Q: Now, turning to ---

13 **THE COURT:** Well, I don't have to. I am.

14 Q: Turning to the elevation. You mentioned
15 elevations and there was some discussion this
16 morning about elevations at Captain Sam's, the
17 dunes. What are the elevations that we're
18 talking about on Captain Sam's? We heard some
19 numbers thrown around this morning.

20 **MS. ARMSTRONG:** Objection, Your Honor, I'm not ---

21 Q: Are you familiar personally with the elevations
22 at Captain Sam's?

23 A: Yes, there are remnant dune ridges that get up
24 to elevation 14, 15. There are troughs and
25 there are certainly sloughs that get to lower



1 elevations.

2 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 16:**

3 **MR. WALKER:** Your Honor, I understand The Court's
4 decision and we would still move 16 into
5 evidence. I'm only saying this because I
6 couldn't remember if I moved it into evidence
7 and you denied it yet.

8 **RULING OF THE COURT:**

9 **THE COURT:** I don't think I ruled on that. I'm
10 denying it along with the proffer. I mean, if
11 things change, that may be different, but right
12 now, no.

13 **MR. WALKER:** There was one other ---

14 **MS. ARMSTRONG:** Your Honor, may I just -- for the
15 record, I want to just make sure I state my
16 objection to this with respect to Exhibit 16, it
17 goes a little bit beyond 15, which is, some of
18 the case law that we cited last week discussed
19 that when a witness puts a mark on a drawing or
20 a map, that's hearsay. And so we -- because a
21 witness has put -- maybe not an X, but they've
22 put colors on this map, that work of an
23 individual that's altered the figure is hearsay
24 and Mr. Pantlik testified he wasn't the one who
25 did that. So I would just add that to our



1 objection for the record.

2 **THE COURT:** All right.

3 **MR. WALKER:** The witness testified that the coloring
4 was in line with the designations on the report.

5 **MOTION TO ADMIT RESPONDENT'S EXHIBIT NUMBER 33:**

6 **MR. WALKER:** The last question is, I cannot remember
7 whether we admitted the three pictures that were
8 Exhibit 33 into evidence and if we did not, we
9 would now move them into evidence. He testified
10 to them. They were the shots of -- three shots
11 of the beach, starting near the tip of Captain
12 Sam's and coming back to Beachwalker immediately
13 after the hurricane.

14 **THE COURT:** Okay. I see them.

15 **MR. WALKER:** There are actually four and I don't know
16 if we looked at the fourth one. Could we have
17 the fourth one, please, just to make sure the
18 Court's seen all four? Thanks.

19 **THE COURT:** So that's 33 and not 83?

20 **MS. ARMSTRONG:** What number?

21 **MR. WALKER:** It's 33.

22 **MS. ARMSTRONG:** We don't have any objection.

23 **RULING OF THE COURT:**

24 **THE COURT:** That's admitted. That being 33 is
25 admitted.



1 (Respondent's Exhibit Number 33 was admitted into
2 evidence.)

3 Q: Nice job. Thanks.

4 MR. WALKER: That's all we have. Thank you, Your
5 Honor.

6 THE COURT: Do y'all need a break or are we ready?

7 MS. ARMSTRONG: We -- I'm ready. I just want to --
8 before I get started, I wanted to make sure the
9 Court knows I'm going to be, I would imagine at
10 least 45 minutes, so as long as that's okay.

11 THE COURT: Yeah. Everybody okay over here?

12 MS. ARMSTRONG: I think I would -- if we are going to
13 sit in -- if we are going to be in here for
14 maybe another hour, then I do want to take a
15 break?

16 THE COURT: Well, now, you've gone from 45 minutes to
17 an hour.

18 MS. ARMSTRONG: Well, it could -- I think I said at
19 minimum of, so I just wanted to make sure I was
20 preparing everybody.

21 THE COURT: Okay.

22 MS. ARMSTRONG: I will move as quickly as I can, but
23 ---

24 THE COURT: Okay.

25 MS. ARMSTRONG: --- there's a lot of ground to cover.

