

APPENDIX 3

**Stakeholder Participants, Public Hearing Minutes
Stakeholder Suggestions**

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6F | Saturday, August 26, 2017 | Tampa Bay Times SPC

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PUBLIC MEETING: SHELL KEY PRESERVE MANAGEMENT PLAN REVIEW

The Shell Key advisory Group will hold a public meeting to review the proposed update to the Shell Key Preserve Management Plan from 6 - 8 p.m. on **Monday, Sept. 25** at the Parks & Conservation Resources Administration building (12520 Ulmerton Road., Largo). The proposed plan can be viewed at www.pinellascounty.org/park/managedlands/skp.htm. For more information, call (727) 582-2100.

Pinellas County complies with the Americans with Disabilities Act. If you are a person with a disability who needs any accommodation in order to participate in this proceeding, you are entitled, at no cost to you, to the provision of certain assistance. At least seven days prior to the meeting, contact the Office of Human Rights, 400 S. Fort Harrison Ave., Suite 500, Clearwater, FL 33756, (727) 464-4062 (V/TDD).

8/26/17

519583

Tampa Bay Times

Published Daily

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COUNTY OF Pinellas County

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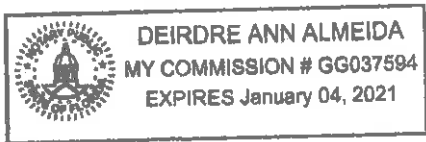


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SHELL KEY ADVISORY GROUP PUBLIC MEETING
SHELL KEY PRESERVE MANAGEMENT PLAN REVIEW

September 25, 2017

APPEARANCES: STEVE HARPER, ENVIRONMENTAL DIVISION MANAGER
PAM LEISURE, ENVIRONMENTAL PROGRAM MANAGER
PAUL COZZIE, BUREAU DIRECTOR
PAUL SACCO, ASSISTANT COUNTY ADMINISTRATOR
KELLI HAMMER LEVY, PUBLIC WORKS DEPARTMENT
BRENDAN MACKESEY, LEGAL DEPARTMENT
MAYA BURKE, TAMPA BAY ESTUARY PROGRAM
CHARLIE JUSTICE, PINELLAS COUNTY COMMISSION
MORGAN PARKS, FLORIDA FISH & WILDLIFE
NANCY DAVIDEK, SHELL KEY SHUTTLE
MARY ANN RENFROW, TIERRE VERDE COMMUNITY
BRUNO FALKENSTEIN, SEA TURTLE TRACKERS
PETER CLARK, TAMPA BAY WATCH
DAN SAVERCOOL, ST. PETE AUDUBON
ANN PAUL, AUDUBON FLORIDA
JACK COLLETTI, SHELLKEY.ORG

REPORTED BY: RUTH A. CARNEY, Notary Public
State of Florida at large

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1 MR. HARPER: All right. I think we'll go ahead
2 and get started if you can please take your seats.

3 All right. Well, welcome to the Shell Key
4 Advisory Group public meeting for the Shell Key
5 Preserve Management Plan update. My name is Steve
6 Harper and I'm the environmental division manager for
7 Pinellas County Parks and Conservation Resources
8 Department.

9 We're having a little bit of technical trouble
10 with our microphone so we're just go to speak loudly.
11 If you can't hear, please raise your hand or give me
12 a signal that you're having trouble hearing.

13 We're -- we're formed here today as required by
14 the state to form a Shell Key Advisory Group as a
15 means for a diverse group of stakeholders to provide
16 advice concerning the management plan update. Staff
17 will review and consider all recommendations we
18 receive tonight; however, it is not necessary for
19 members of the Shell Key Advisory Group to reach
20 consensus and no votes will be held. All opinions
21 are welcome tonight.

22 This evening we will present a guided overview
23 of the proposed plan. We will pause at the end of
24 each section so that members can have a roundtable
25 discussion and provide comments and recommendations

1 for that section. If -- Shell Key Advisory Group
2 members, if you have marked up a hard copy of the
3 plan and would like to provide that to staff at the
4 end of the meeting, that way we can focus -- if
5 they're like typographical or grammatical
6 suggestions, that way we can focus on more
7 substantive comments here tonight in an open forum.

8 Whoops.

9 MR. CLARK: Before we --

10 MR. HARPER: The public is asked to hold all
11 question and comments until the end of this guided
12 process, at which time we will have a designated time
13 to hear public comments. Members of the public
14 wishing to speak are invited to complete a speaker's
15 card available on the side table in the back. If you
16 prefer not to speak, you can use that same card, just
17 check that you're just providing comments and would
18 not like to speak and turn in your comment card just
19 like the other ones. And I did want to let you know,
20 we are recording this meeting as part of the public
21 record up front here.

22 Sorry.

23 We held a public information meeting last week
24 at Tampa Bay Watch and I wanted to provide a quick
25 summary of the public comments we received for your

1 consideration.

2 Seven comments were received, two of which were
3 in support mentioned things like the plan is working,
4 the sheriff's office is doing a good job with
5 enforcement, and five opinions were concerned with
6 closure of the north pass. Items mentioned were poor
7 water quality, dying seagrass, access to predators of
8 nesting birds, and they would like the pass dredged.

9 We also received comments directly from two
10 additional citizens by email, both suggested
11 maintaining camping at Shell Key Preserve but to
12 implement a permit fee. One also suggested that we
13 indicate a new manatee protection zone that's located
14 near the preserve.

15 At this time I'd like to introduce some of the
16 staff members.

17 As I said, my name is Steve Harper with the
18 Parks and Conservation Resources Department, and our
19 bureau director is Mr. Paul Cozzie, and our assistant
20 county administrator is Paul Sacco. From our
21 environmental group in the public works department is
22 Kelly Levy, and from our legal department is Brendan
23 Mackesey, and he will keep us on the straight and
24 narrow.

25 So before we get started, let's go ahead around

1 the advisory group table and if you could please just
2 introduce yourself and the group that you're
3 representing so we all know one another.

4 MS. BURKE: I'm Maya Burke with the Tampa Bay
5 Estuary Program.

6 COMMISSIONER JUSTICE: Charlie Justice
7 representing the Pinellas County Commission.

8 MS. PARKS: Morgan Parks, Florida Fish and
9 Wildlife.

10 MS. DAVIDEK: Nancy Davidek, Shell Key Shuttle.

11 MS. RENFROW: Mary Ann Renfrow, Tierre Verde
12 Community Association.

13 MR. FALKENSTEIN: Bruno Falkenstein, Sea Turtle
14 Trackers.

15 MR. CLARK: Peter Clark, Tampa Bay Watch.

16 MR. SAVERCOOL: Dan Savercool, St. Pete Audubon.

17 MS. PAUL: Ann Paul, Audubon Florida.

18 MR. COLLETTI: Jack Colletti, shellkey.org.

19 MR. HARPER: Okay. Are there any questions
20 about the process tonight; is everybody clear?

21 Yes, sir.

22 MR. CLARK: I'm not totally clear on the role of
23 this committee. Since we're not going to be voting
24 tonight, can you just tell us exactly what we're here
25 for tonight --

1 MR. HARPER: Right.

2 MR. CLARK: -- and how we can benefit you?

3 MR. HARPER: Yes.

4 If you provide us your detailed comments, that's
5 what staff will take back and consider as we make
6 updates to the management plan draft.

7 MR. CLARK: So we're just here to provide
8 comments to you?

9 MR. HARPER: An advisory group, yes, sir.

10 MR. CLARK: Okay. So it's a really short time
11 line between now and when it goes to the county
12 commission, so how -- if we're going to be effective,
13 we would like to see, I would imagine, some of those
14 comments that you received last week as well as what
15 we provide today go into the management plan.

16 MR. HARPER: We can provide a copy of those.
17 Yes.

18 MS. RENFROW: It was my understanding that there
19 was going to be a second public meeting in October
20 for comments from the public as well.

21 MR. HARPER: Not to my knowledge.

22 MS. LEISURE: At the board meeting.

23 MR. HARPER: Oh, yes, the board meeting is a
24 public meeting. Let me pull up the agenda here.

25 So this is the time line for development of the

1 management plan. It's a little different than some
2 of our other preserved management plans in that we
3 manage lands for the state, so it adds an additional
4 step at the end.

5 So we drafted the plan available for public
6 review on our website in August of 2017. The website
7 is indicated here as well as on the agenda sheet if
8 you'd like to take one at the back of the room when
9 you leave. If you'd like to read more about the
10 plan, the entire plan is provided in detail as a PDF,
11 as well as other information related to things like
12 camping and the regulatory zones at the preserve.

13 We held -- as I mentioned, the public
14 information meeting was at Tampa Bay Watch last week.
15 Today is the Shell Key Advisory Group meeting. We
16 will take -- as Peter indicated, we will take your
17 comments and com --

18 MR. COLLETTI: Sorry.

19 MR. HARPER: -- complete a draft of the plan.

20 We'll present that to the BCC, the Board of
21 County Commissioners, in late October. Potentially,
22 early November the Board will vote on the plan and
23 adopt the plan at that time hopefully.

24 Once we get approval by the Board of County
25 Commissioners, we'll take that plan to the Florida

1 Department of Environmental Protection, the ARC,
2 Acquisition Resource Council, in Tallahassee for
3 their approval as well.

4 Does that answer your question?

5 MS. RENFROW: Me?

6 MR. HARPER: Yes.

7 MS. RENFROW: Yes, but that wasn't the way I was
8 told to begin with. It was two separate public
9 meetings and the advisory council meeting.

10 MR. HARPER: Yeah, this -- this is the plan as
11 I -- as I've known it, so maybe there's a
12 misunderstanding.

13 MR. CLARK: So there's not a requirement for a
14 couple of public meetings?

15 MR. HARPER: Pardon me?

16 MR. CLARK: There's not a requirement for
17 several public hearings or public meetings?

18 MR. HARPER: Yeah. Yeah, just this meeting is
19 required.

20 Okay. So with that said and with
21 introductions -- yes, ma'am.

22 MS. PAUL: Wait. The public will be allowed to
23 speak at the end of this meeting also, right?

24 MR. HARPER: Correct.

25 MS. PAUL: So in a way --

1 MR. CLARK: In a sense, they have two
2 opportunities.

3 MS. PAUL: Yeah.

4 COMMISSIONER JUSTICE: And last week if they
5 came to last week's meeting.

6 MR. CLARK: Yeah.

7 MR. HARPER: Okay.

8 With that said, we'll go ahead and step through
9 the plan, then. Pam Leisure is the land manager for
10 all of the parks and preserves south of Ulmerton
11 Road, including Shell Key Preserve. So, Pam.

12 MS. LEISURE: Okay. This evening -- can you
13 hear me?

14 (A number of people respond no.)

15 MS. LEISURE: I can't speak any louder.

16 MR. HARPER: Well, you're going to have to.

17 MS. LEISURE: This evening I'll provide an
18 overview of the major sections of the management
19 plan. This will include an introduction to the
20 preserve, a description of the natural and cultural
21 resources, our management of these resources with the
22 seven objectives, public recreation with two
23 objectives, an outreach and education with one
24 objective.

25 As we go through the plan, we'll pause at the

1 end of each of these major sections so that members
2 of the Shell Key Advisory Group can have a roundtable
3 discussion, and that's where -- where this discussion
4 comes into play.

5 For the resource management section, however,
6 we'll pause at the end of each of the seven major
7 topics of the objectives.

8 Okay. Can you hear me now?

9 (A number of people respond yes.)

10 MS. LEISURE: Thank you.

11 Okay. Shell Key is located in southern Pinellas
12 County. The total size of the preserve, including
13 the main island, the smaller mangrove islands and its
14 waterways is 1,828 acres. Shell Key itself covers
15 approximately 195 acres with a linear distance of
16 approximately 2.67 miles.

17 Some of the same natural features that attract
18 wildlife to the preserve also attract thousands of
19 human visitors annually. There are a number of
20 resource-based outdoor activities that visitors can
21 enjoy at the preserve.

22 Okay. This -- this is a slide showing the --
23 showing the ownership within the preserve boundary.
24 The green is Pinellas County, 819 acres.

25 The State of Florida has several different

1 pockets of land in there. We have submerged land
2 program, which is included in our lease agreement, so
3 that will be all the submerged water that's not
4 colored by any other color. The Internal Improvement
5 Trust Fund, that's the yellow, which includes the
6 main island, and then DOT has a small portion along
7 the shore, the eastern shoreline, 3 acres, and that
8 leaves us with 33 acres of private held interest, and
9 those are purple.

10 Okay. You've heard us talk about the lease
11 agreement. We entered into the agreement in December
12 of 2000. This agreement was between the board of
13 trustees and the Internal Improvement Trust Fund of
14 the State of Florida in Pinellas County.

15 In the lease agreement it states that Shell
16 Key's managed only for the conservation and
17 protection of natural and historical resources and
18 for resource-based public outdoor activities and
19 education which are compatible with the conservation
20 and protection of these public lands. A management
21 plan must be submitted and approved by the Division
22 of State Land's Department of Environmental
23 Protection in accordance with the Florida
24 Administrative Code.

25 We have special conditions attached to this

1 lease agreement to ensure management is compatible
2 with protection and conservation of wintering and
3 nesting shorebirds as set forth in the Florida
4 statutes; delineate the core areas for the protection
5 of shorebirds within the greater Shell Key area; post
6 critical bird habitat to prohibit trespassing; posted
7 boundaries should remain flexible to reflect changes
8 in the island geography and topography; prohibit
9 beach raking and mechanical cleaning during shorebird
10 and marine turtle nesting seasons.

11 Okay. These four aerials show a recent 42-year
12 history of Shell Key and the preserve, and you can
13 kind of imagine the preserve boundary sort of in this
14 area.

15 1973 -- we go from 1973 to 1991. You can see
16 there's just a couple islands, and then three
17 islands. Then we go to 2000 and we see one island
18 and that's -- islands are dynamic in nature. The
19 aerial shows two small islands growing and eventually
20 merging to form the barrier island known as Shell
21 Key.

22 The island then connected in -- to calling it an
23 island in 2015. And you can note -- this isn't
24 working either now -- the smaller mangrove islands
25 that are within the preserve boundary, those have

1 really not changed over that 42-year time period.

2 All right. Now the shoreline changes. The
3 dynamic nature of the barrier island is reflected in
4 the recent erosion of sand along the northern half of
5 the western shoreline. The blue line on the western
6 shoreline indicates the 2017 -- or 2007 shoreline,
7 that's where that was back then, and then the red
8 line is where -- where we drew that on the map for
9 2016. You can see there's a considerable difference
10 between the two lines.

11 Now, on the northern shoreline on the eastern
12 tip we have an increasing of sand, and you can see
13 this -- the same kind of a difference, only this time
14 the 2007 line is well south of that 2016 line where
15 it finally created to a Collany Island.

16 This photograph shows the northeast tip of Shell
17 Key which attached to Collany Island in 2015. The
18 closure of the northeast tip has been the topic of
19 concern for many local citizens and boaters. The
20 County's position on addressing this has been
21 consistent. We are not opposed to dredging, but need
22 to be responsible stewards of taxpayers dollars. We
23 currently do not have enough information to determine
24 the best and most effective way to dredge and
25 maintain the channel.

1 We know from recent experience that any benefits
2 of a typical maintenance dredge would be very short
3 term, and that is not a cost effective approach. The
4 County has contracted Dr. Ping Wang from University
5 of South Florida to conduct a study of Bunces Pass
6 and Pass-a-Grille inlets. This project includes
7 modeling the dynamic forces that cause movement of
8 sand in this area. Results of this study will allow
9 us to address the closure and potential remedies for
10 using an informed data-supported approach. We expect
11 the study to be completed near the end of the year.

12 MR. HARPER: All right. So that concludes the
13 introductory section, so we can just step through
14 with the committee, and if there are any questions or
15 comments that you would like to offer at this time,
16 we can discuss them as a group, and we'll be taking
17 notes.

18 See if this works. Now that that works, maybe
19 this will work.

20 No.

21 Okay. So I'll just play Mr. Microphone here.

22 Ann.

23 MS. PAUL: So I have three questions. The first
24 one is, the original management plan I think was done
25 in 2000.

1 MR. HARPER: 2000.

2 MS. PAUL: So here we are 17 years later. When
3 will the next -- when will the management plan be
4 reviewed again?

5 MR. HARPER: So we're on a 10-year cycle with
6 our management plan review. So we did it in 2000.
7 There were significant changes and impacts that we
8 wanted to address in 2007 so we did it a little
9 sooner, made those changes in 2007, and so now we're
10 '17, so '27 will be the next time.

11 MS. PAUL: Okay. With regard to the private
12 landholdings, is there any suggestion that it might
13 be a good idea to require those?

14 MR. HARPER: Yes, the landholdings are always on
15 our list of potential acquisitions, and it would be
16 nice to -- if we could acquire those. So far we
17 haven't had interested -- in the seller to sell
18 those.

19 MS. PAUL: So you don't have willing sellers, no
20 willing sellers?

21 MR. HARPER: Correct.

22 MS. PAUL: Okay.

23 MR. HARPER: Yeah, as part of the state review,
24 we have to identify areas that we'd like to acquire,
25 as well as areas we might want to surplus.

1 MS. PAUL: Okay. Is there any beach raking
2 or -- and so forth done?

3 MR. HARPER: No, that's prohibited as part of
4 the lease agreement and we don't do any mechanical
5 raking or clearing of the wrack land.

6 Yes, sir.

7 MR. FAULKENSTEIN: But I thought the only time
8 it was prohibited is during the bird nesting and sea
9 turtles, so I think you guys should put in your plan
10 a 12 month out of the year approach to prohibit it,
11 because basically, when that's -- that seaweed lands
12 on the beach, it turns into fertilizer and it blows
13 into the sea oats, and that's what keeps the sea oats
14 growing, but I think you should put it in your plan.
15 There's none whatsoever, ever.

16 MS. LEISURE: That's actually part of the lease
17 agreement so we would have to change --

18 MR. HARPER: It's 12 months.

19 MS. LEISURE: No, it just says there's no beach
20 raking during that nesting period.

21 MR. HARPER: So we could -- we could address
22 that as part of our own --

23 MS. LEISURE: We could have --

24 MR. FAULKENSTEIN: I just think it's a good
25 idea.

1 MR. HARPER: Thank you.

2 MS. RENFROW: Are we addressing all subjects at
3 once here or --

4 MR. HARPER: Just the introduction. So if you
5 have questions about the dredging, I would advocate
6 to hold off on that until we get to the research
7 section where we talk about Dr. Wang's study a little
8 bit more. I think that would be the appropriate
9 time.

10 MS. RENFROW: So right now we're just discussing
11 boundaries.

12 MR. HARPER: Introduction. The introduction,
13 yes: Boundary, history, lease agreements, that kind
14 of thing.

15 Any other questions?

16 Okay.

17 MS. BURKE: You have one.

18 MR. HARPER: I'm sorry.

19 MR. CLARK: So what were those significant
20 changes in 2007 that required an accelerated review?

21 MR. HARPER: Right.

22 So in 2007 we suggested making changes to two
23 major rules. One was pets being allowed in the
24 preserve to be consistent with all of the other
25 preserves and management areas; the second was

1 alcohol. The rule at the time was that there was no
2 alcohol on Shell Key, the island, not within the
3 preserve. It was technically legal in the preserve
4 so we got a lot -- or it made it very challenging for
5 enforcement. It became a very unsafe environment at
6 certain times of the year.

7 We got what we colloquially call the Shell Key
8 shuffle, where they would be standing drinking and
9 then the sheriff's coming so you step in the water
10 and now I'm legal because I'm not on the island. So
11 we've noticed -- just as an aside, we've noticed
12 significant changes in the behavior of the visitors
13 to the island now, so that that ruckus kind of party
14 atmosphere is no longer a big part of Shell Key
15 Preserve.

16 MR. CLARK: They're down at Outback now.

17 MR. HARPER: Yes, that's the state's concern at
18 this point.

19 MR. CLARK: What's the rule on pets at Shell
20 Key?

21 MR. HARPER: No pets in the preserve.

22 MR. CLARK: No pets.

23 MR. HARPER: Yeah, they -- the deputies will
24 typically give a warning if someone's clearly passing
25 through the preserve, but if they've beached up on

1 their boat with a dog, they'll stop and enforce that
2 rule.

3 MR. CLARK: Gotcha.

4 MR. HARPER: Yes, ma'am.

5 MS. RENFROW: Just as a comment, I would
6 personally like to see a more updated photo than in
7 2016 of Shell Key, and they are available. I'm sure
8 Peter Clark has several drone photos that are
9 available, because the island has changed
10 significantly in the past year.

11 MR. HARPER: Okay. Thank you.

12 MR. CLARK: In the past month.

13 MS. RENFROW: Yes.

14 MR. HARPER: Yeah, we need a live webcam.

15 MS. RENFROW: There's actually a new channel
16 forming.

17 MR. HARPER: Yeah, absolutely.

18 MR. CLARK: I need to comment on that. Let the
19 record show I haven't flown the drone in Shell Key
20 Preserve.

21 MS. LEISURE: She's trying to get you in
22 trouble.

23 MR. FAULKENSTEIN: If I want to camp there, I'm
24 supposed to go into -- over to Fort DeSoto and get a
25 permit?

1 MR. HARPER: Let's hold questions on camping
2 until we get to the public use section if you don't
3 mind, and that way we can just kind of step through
4 the plan essentially and address questions as they
5 come up, but certainly camping will come up.

6 MS. LEISURE: Now let's move on to the next
7 section of the plan which provides a description of
8 the preserve's natural and cultural resources. As
9 known to you, I'll highlight some of these resources.

10 Shell Key Preserve contains five distinct
11 communities as described by the Florida Natural Areas
12 Inventory or FNAI. If you're not familiar with FNAI,
13 it is an approach that describes distinct natural
14 communities with species, composition of plants,
15 animal, fungi and microorganisms naturally associated
16 with each other and geology, soil and hydrology.

17 This map represents the plant communities as
18 determined in 2007, so it does not reflect the recent
19 island migration. Staff and volunteers have
20 identified 108 species of plants on Shell Key.

21 Here are four of the upland communities: We
22 have the marine tidal, which is 168 acres. That's
23 primarily your mangrove community. Marine tidal
24 marsh, we only have 6 acres. Those are the emergent
25 grasses, such as Spartina. Beach dunes we have

1 157 acres, and this is where wind and water are
2 environmental forces that shape the dunes. The sand
3 builds up and the plants begin to colonize, trapping
4 more sand and eventually forming those dunes.

5 Marine consolidate -- unconsolidated, there's
6 642 acres as a tidal zone and beaches that are
7 located below the beach dune community. We also have
8 984 acres of marine grass bay, and we do have 4
9 species of seagrass that we find in the preserve.

10 Shell Key Preserve provides a critical habitat
11 required by resident and migratory birds to feed,
12 rest and reproduce. Since 2000 Pinellas County staff
13 and volunteers have recorded 156 species of wintering
14 and nesting birds in the preserve.

15 Since 2001 three turtle species have been
16 recorded on the main island or in the preserve when
17 we had the loggerhead sea turtle, green sea turtle
18 and diamondback terrapin.

19 Other reptiles are represented by three species
20 of snakes. In addition to the two pictured here, we
21 also have black racers, and there's only one lizard
22 species that has been identified and that's the brown
23 anole.

24 Twenty-five species of butterflies, two species
25 of moths have been observed on Shell Key.

1 MR. HARPER: Okay. So now we'll field questions
2 and comments on the natural resources section. So
3 this is primarily a description of the natural
4 resources and cultural resources of Shell Key.

5 So are there any questions or comments on this
6 section?

7 MR. SAVERCOOL: The surveys natural resources
8 data are presented as an additive list, as new
9 species are observed as additive list. The strength
10 of management plans is the ability to monitor the
11 effectiveness and revise the plan accordingly based
12 upon the best available data. Do your surveys also
13 focus on extirpation or loss of species, and if not,
14 this is a significant shortcoming of any management
15 plan?

16 MR. HARPER: Yes, that is a fair statement that
17 we do not do nearly the monitoring that we did in the
18 past due to -- it's actually in the amount of staff
19 that we have to complete these. We rely on
20 volunteers.

21 We have done trend analyses for certain species
22 and we're able -- like, for example, for the last
23 plan we were able to detect a significant decline in
24 the red knot, which is a species of conservation
25 concern internationally. So our data did that

1 through regular fall/winter surveys on the mudflats.

2 We really do not have the resources at this time
3 to do that regular monitoring, though it's worth
4 noting. As you said, that's how you can determine
5 trends in your natural resources changing over time.
6 So the answer is no, and yes, I appreciate your
7 comment.

8 MR. CLARK: So I think it's really part of an
9 obligation of a management plan to identify needs,
10 and by doing that also identify opportunities to
11 address those needs, and that should include funding
12 opportunities too. If you do not have the resources
13 now to address some of these issues, then we need to
14 look at our elected officials to see how we might be
15 able to develop that, but you can also look at
16 different grant opportunities for funding sources to
17 do that. But that's one of the things that I haven't
18 seen in the management plan, is starting to identify
19 and prioritize the needs that you might have within
20 the Shell Key Preserve, and I think as we start
21 getting more and more into the resource management
22 section, you have some real needs, some critical
23 needs out there, and by at least putting together a
24 grocery list and starting to work with the community
25 like this group here, you can prioritize those needs

1 and then identify prioritized dollars that could
2 address those needs, but without having the list, I
3 think we're missing the boat.

4 MR. HARPER: Okay. Thank you.

5 Other comments?

6 MS. PAUL: Steve.

7 So I just wanted to say that in the past during,
8 you know, starting 1990 and so forth, there was truly
9 significant beach nesting bird activities on the
10 islands that has -- no longer occurs out there, and
11 we -- I think we know the reasons why, the presence
12 of predators that are really difficult to keep off,
13 and but -- but I think that when we look at the
14 resources out in the region of Shell Key, I think we
15 can recognize that Shell Key is not an isolated piece
16 of the sort of lower Boca Ciega Bay on one side and
17 Gulf of Mexico ecosystem on the other, and it's a
18 piece of this part of the world that is -- because it
19 is undeveloped, really does get sculpted by the
20 storms and the wind and the tides and the waves and
21 so forth. And Fort Desoto is part of it and so is
22 the new Outback Key, and so I'm just thinking that
23 maybe we need to be looking at the county approaching
24 all of these resources, these natural resources that
25 are -- that are one and the same in many respects.

1 MR. HARPER: Right. Right. That's a good
2 point, and obviously, we manage Fort DeSoto Park as
3 well in that resource and we do -- when we get to the
4 monitoring section in the management section of the
5 plan, we do participate regularly with the regional
6 shore -- nesting shorebird groups, and I think you're
7 part of that as well. So we do try to take a
8 regional approach and try to understand techniques
9 that may be working in certain areas or attempts that
10 didn't work and try to get some lessons learned so
11 that we can manage all of these limited resources
12 throughout the -- throughout the region.

13 Other questions?

14 Yes.

15 MS. BURKE: Yeah, I was going to make a similar
16 point, but I'll say it now rather than waiting for
17 the resource management section. I concur
18 wholeheartedly with Ann; I do think that it warrants
19 further discussion in this Shell Key plan how each
20 nesting birds and turtles fit into the regional
21 picture of Fort DeSoto and Outback Key and some of
22 those other resources, because I think some of these
23 questions are going to have implications for what the
24 public use and public access and what those conflicts
25 are, and so without a thorough discussion of the

1 other opportunities for these -- for birds and
2 turtles and things like that, I think it's hard to
3 drive some of the decisions that need to go into this
4 plan specifically, so I do think it needs more
5 information from these adjacent resources.

6 MR. HARPER: Okay. Thank you.

7 Other questions?

8 All right. Let's go ahead and move on to the
9 management section.

10 MS. LEISURE: Okay. Having just -- can you hear
11 me?

12 Having just described the natural and cultural
13 resources, let's now discuss their management.

14 The resource management section is a central
15 component of the plan and it contains our management
16 objectives and goals. I'm going to touch on each of
17 the seven topics that are associated objectives one
18 at a time. More detail for each is provided in the
19 plan itself.

20 Habitat reservation and improvement, the
21 objective is to provide resource management to
22 restore and improve the natural communities of Shell
23 Key.

24 Preserve, not just the island.

25 By 2013 we completed a phased removal of all the

1 exotic vegetation from Shell Key. We continue to
2 conduct maintenance activities to remove invasive
3 exotic vegetation from Shell Key to prevent
4 reestablishment.

5 To restore this area we replanted with six
6 species of native trees. Within the next 10 years we
7 plan to remove all of the exotic vegetation from the
8 smaller mangrove islands. If necessary, we will
9 replant these areas with native vegetation.

10 MR. HARPER: Okay. So because the -- because
11 the management section has seven diverse topics,
12 we're going to pause at the end of each topic. It
13 might feel a little broken up, but I think it would
14 be easier to get the comments for each section as we
15 stop through. When we get to the public use, there's
16 two objectives so we'll just do both of those
17 together.

18 So with the understanding of -- the exotic
19 restoration activities are primarily focused on
20 exotic control and replanting with native species as
21 necessary to fill in behind the removal. Our removal
22 is primarily focused on Australian Pine, but we do
23 remove all substantive Class I and Class II invasive
24 exotic species that we find on the island.

25 So are there questions on the restoration

1 activities?

2 MS. PAUL: I just want to say congratulations on
3 the excellent job of getting all those Australian
4 Pine -- I mean, what a job, and it wasn't easy and I
5 know it cost the department quite a lot of time and
6 energy as well as funds, and way to go. I just want
7 to say that.

8 MR. HARPER: Thank you.

9 MR. SAVERCOOL: This will be the second to last
10 time I'll belabor the point about prioritizing
11 projects, but this is a perfectly good example of
12 trying to prioritize actions and weigh the financial
13 abilities to perform the actions.

14 One thing the plan lacks right now is a
15 prioritization. We already know that you're strapped
16 for cash, but if you could prioritize the species,
17 the specific communities on an annual basis, it'll
18 help you afford the actions and track continual
19 progress towards achieving your goal. For example,
20 something as simple as we don't have a lot of money
21 to control all the Brazilian Pepper, so this year
22 we're just going to focus on the females. Next year,
23 as we get more funding, we'll focus on the other, on
24 the males.

25 MR. HARPER: Right.

1 So currently we're in a maintenance mode on the
2 main island so that is the goal, is to continue with
3 the maintenance of all exotics, especially I and II,
4 and the goal for the future is focused on really one
5 primary habitat type, the mangrove islands, and
6 that's to get the exotics there. They are primarily
7 Australian Pines.

8 MR. SAVERCOOL: And that information could find
9 its way into the plan. That way the readers, the
10 taxpayers, have a full understanding of you've done
11 your homework, you have a solid plan, you have goals,
12 objectives and actions for that plan.

13 MR. HARPER: Thank you.

14 MR. CLARK: Yeah, I would agree with that as
15 well; it helps to provide some structure in priority
16 too.

17 This is the one resource management category
18 that you had for habitat restoration and it only
19 includes exotic species control, so it doesn't
20 necessarily address some of the other resources that
21 you have out there.

22 As an example, seagrasses pops up under
23 monitoring. Some of the other birds and turtles pop
24 up by themselves, but one has to assume that, given
25 the scale of Shell Key Preserve, that there's more

1 resource needs that you have out there than just
2 exotic plant control.

3 Are you looking at the dune enlargements, are
4 you looking to enhance seagrass beds that are out
5 there, or are you just letting Mother Nature kind of
6 mold it the way that she typically does?

7 MR. HARPER: Right.

8 So our efforts have focused primarily on exotic
9 control. We have done some experimental work with
10 seagrass transplanting and restoration techniques on
11 sort of a experimental basis. We've not done major
12 seagrass restoration efforts, and it is awkward -- I
13 agree with you, it is a little awkward for certain
14 things, like the beach nesting birds and the
15 seagrass, as they can -- obviously, they are part of
16 a restoration and habitat improvement, but they're
17 also specific projects that we do for -- either
18 through monitoring or research. So I agree it could
19 go either place, but, yeah, we haven't focused on
20 other restoration activities, though if that -- that
21 is certainly something we can look into.

22 MR. CLARK: If I could, the -- it didn't look
23 like it was included within the Shell Key Preserve,
24 but the county owns some uplands just adjacent to the
25 preserve. Is that under a separate management plan?

1 MR. HARPER: Yes, that's the Cabbage Key
2 Management Area, so that's managed under a different
3 approach.

4 MR. CLARK: Gotcha.

5 MR. HARPER: And we do focus on certain multiple
6 habitats there, a significant resource for migratory
7 birds specifically.

8 MS. PAUL: So I just wanted to bring forward the
9 mammalian control issues.

10 I know this is difficult, particularly with the
11 connection now to Collany Key, but we won't have the
12 opportunity for birds to reneest on the ground until
13 raccoons, possibly coyotes or whatever are completely
14 eliminated from this island.

15 MR. HARPER: Right.

16 That might be a longer discussion as part of the
17 beach nesting bird section, but I'll comment just
18 quickly since you brought that up.

19 We've always had terrestrial predators at Shell
20 Key Preserve. We've done control efforts in the
21 past -- not coyotes, I'll say that, but raccoons
22 especially can make their way across, especially low
23 tides in the mudflats and walk across, so we've had
24 raccoons in the past and we've controlled raccoons in
25 the past.

1 The land bridge does introduce an easier access
2 mechanism for terrestrial predators. I will -- when
3 we get to the beach nesting birds, I'll point out
4 that terrestrial predators are just one of a handful
5 of different factors that affect nesting success,
6 including severe storms and overwash. The avian
7 predators have been documented to be a significant
8 impact: Fish crows, night herons, different species.
9 And so we -- in the plan we propose to monitor, and
10 as it appears that the terrestrial predators have
11 become a nuisance, then we'll take control steps to
12 try to remove those.

13 Other questions?

14 All right. Let's move on to the next topic.

15 MS. LEISURE: Okay. The next topic is imperiled
16 species protection. The objective is to minimize
17 impacts to protect those imperiled species utilized
18 in the preserve, including beach nesting birds,
19 nesting sea turtles, also manatees.

20 Habitat for nesting birds is delineated using
21 posts, twine and signs.

22 Okay, and you can see the oystercatcher and
23 little baby scurrying behind the twine.

24 We also provide support for our Florida Fish and
25 Wildlife Conservation Commission and the Sea Turtle

1 Trackers partners. When a turtle nest is
2 encountered, these volunteers install a cage to
3 minimize disturbance and to protect it from
4 predation, and they also have a clearly identified
5 sea turtle nest on each of these cages.

6 We continue to minimize impacts to manatees and
7 other species through posting enforcement of
8 established aquatic use zones.

9 MR. HARPER: Okay. So the imperiled species
10 protection, as Pam said, really focuses on the
11 nesting shorebirds; the establishment of the birds
12 preservation area is permanently delineated. As
13 you'll see as part of our monitoring efforts in the
14 next section, when birds choose to nest outside of
15 the permanently posted area, then we'll temporarily
16 twine. They'll temporarily twine that area to
17 protect the nest and keep people away from the nest.

18 The manatees are really passively protected
19 through our regulatory zones, as we'll get into a
20 little bit later tonight, and then, obviously, rely
21 heavily on the Turtle Trackers for their huge efforts
22 for monitoring this and turtles and protecting them
23 with the cages.

24 Any questions for this part, the imperiled
25 species?

1 MR. FAULKENSTEIN: With the condos that are
2 being built on the northeastern end of Shell Key,
3 it's really going to impact the turtles if the
4 county's lighting ordinances -- by the way, the
5 county only has a lighting ordinance for new
6 construction. They don't have a turtle ordinance for
7 the whole county for lighting. That would be a
8 wonderful gift if Pinellas County would come up with
9 a lighting ordinance, but for new construction I
10 would hope that someone from the building department
11 will enforce the turtle lighting ordinance that the
12 county has in place for new construction.

13 MR. HARPER: Thank you.

14 Other questions?

15 MS. RENFROW: Is this when we can address the
16 coyote issue?

17 MR. HARPER: Sure.

18 MS. RENFROW: Okay. I live on Tierra Verde and
19 I am familiar with an issue that our community has
20 had with the increase in the number of coyotes in our
21 area, and I know that with the new land bridge that
22 connected Shell Key to Sunset Key or Collany Key
23 it's -- it's enabled the coyotes to cross over and
24 have another abundant food source, which as long as
25 they have an abundant food source, will keep their

1 pack numbers up. They only will reproduce if the
2 environment supports the new offspring. And so I'm
3 confused because I've been working with FWC to
4 address the issue in Tierra Verde, and I was informed
5 by FWC that -- and the county and them will not come
6 out and trap and remove coyotes that are a nuisance
7 or predatory, and then I saw that the county was
8 supporting an effort to remove coyotes from Fort
9 DeSoto from the north beach nesting area. So what is
10 the clear policy with reference to these predators on
11 Shell Key, and what portion of the budget is set
12 aside to address that?

13 MR. HARPER: Right.

14 So the county's policy is -- I believe the
15 phrase is learn to live with them. It's part of the
16 animal control or animal services brochure --

17 MS. RENFROW: Right.

18 MR. HARPER: -- that it's -- sort of they're a
19 known introduced species that is here to say. So,
20 yes, you're right, they won't come and collect the
21 coyotes.

22 So the control efforts at Fort DeSoto and Shell
23 Key would be a targeted effort with a specific goal
24 in mind, not a just remove all the coyotes from
25 Tierra Verde; it would be to remove them that are a

1 nuisance species that are on Shell Key itself.

2 MS. RENFROW: So it was my understanding last --
3 I believe it was last year, and I had some
4 conversations with another gentleman from Turtle
5 Trackers that the nests were being raided, and
6 fortunately you have finally found a way to outsmart
7 the coyotes for now, but when they started raiding
8 nests in Fort DeSoto, then you were more active than
9 addressing the issue on Shell Key. That's just me.

10 MR. HARPER: Was that a grant poll; do you know?

11 MR. COZZIE: I'm not aware of any organized
12 effort that was going on. I think there were perhaps
13 some individuals who took some action, but we didn't
14 pay to have anyone remove them or anything like that.

15 MR. FAULKENSTEIN: Bruno Falkenstein, once
16 again.

17 There's also another problem that you've touched
18 upon, but there's no enforcement behind it, and both
19 on Shell Key at first I saw the same footprints
20 around dog tracks, so I know that people bring their
21 dogs out there to run, and then over on summer -- on
22 Outback Key, that you have no control of I
23 understand, but I've seen the same set of footprints.
24 So some of the destruction isn't necessarily coyote
25 destruction. I think some of it's domestic dogs

1 also.

2 MR. HARPER: Yeah, certainly, the history would
3 suggest that's true. Dogs were a significant problem
4 in 2007 before we had pets removed from the island
5 and -- and based on our knowledge of nesting
6 shorebirds, it doesn't even take the dog running
7 through, just the mere presence, even on a leash, can
8 cause that subtle response and cause them to abandon
9 their nests and their eggs, in which case they may be
10 more vulnerable to just overwarming from the sun or
11 from avian predators who swoop in to get the
12 unguarded eggs.

13 Absolutely, the dogs are a serious concern for
14 all beach nesting bird colonies and it's an
15 enforcement issue. As you said, the rules prohibit
16 pets from the entirety of Shell Key Preserve, so if
17 we see a dog on the island, or in a boat even on the
18 island, then that's when we notify our law
19 enforcement officials to get them out of there.

20 MS. RENFROW: I -- enforcement is an issue again
21 with reference to this and that's because of budget
22 constraints.

23 How many officers do you have assigned to
24 respond to this area or to monitor this area, and is
25 that done at night? Are there just specific hours

1 that that enforcement covers?

2 There are dogs on Shell Key now that are walking
3 with their owners off leash, and that, again, is
4 because the land bridge is available and Sunset Key
5 residents are taking their dogs over there now as
6 they move in, because they're -- it's not clear to
7 them that they cannot bring dogs onto the preserve.

8 MR. HARPER: Well, the preserve rules are
9 clearly posted so I don't know that I -- I buy that
10 excuse that they don't know. They may choose to
11 ignore the rules and do it anyways, but one thing
12 that you can do, is if you see -- like you being
13 local, if you see that, you can give Pam and myself a
14 call and we'll pass that on.

15 We do have significant presence on the water
16 from our law enforcement officials, the Pinellas
17 County Sheriff's Office. The parks department
18 contracts two full-time deputies as part of a legacy
19 of our environmental lands unit. They've merged with
20 the marine unit, and so there are additional
21 officers. Even though parks is not paying for them,
22 there are additional marine officers that -- as we'll
23 get to enforcement here or security in a couple of
24 topics. So that's what we have, but just to be
25 clear, that's for all of our 20,000 acres, not just

1 Shell Key.

2 MR. FAULKENSTEIN: I would suggest that -- in
3 that -- in that northeastern corner, once again, that
4 I don't recall seeing any signs of the rules. I know
5 that the whole island is very well posted except
6 where that land bridge is.

7 MS. RENFROW: That's true.

8 MS. LEISURE: We have posted our preserve
9 boundary signs clearly across that, right in front of
10 the Collany Island land bridge, as close to our
11 boundary as we can. We do have the big four-by-eight
12 rules signs. We have to be careful where we place
13 those. We can put them where they're seen, but
14 imagine that sitting outside your back window every
15 day.

16 MR. HARPER: All right.

17 MR. SAVERCOOL: One final comment: With the
18 exotic species control -- as Ann said, the fauna are
19 not discussed in sea turtles and birds. The only
20 faunal that are discussed are humans, and I would
21 recommend that you also include other nuisance on
22 them.

23 MR. HARPER: Okay. Thank you.

24 MR. CLARK: Yeah, looking at the bird data and
25 the Shell Key Management Plan, they'll -- the intent,

1 one of the principle intents, was to provide
2 opportunities for shorebirds and colonial nesters to
3 utilize the Shell Key Preserve area. Since 2010 it
4 looks like it's only been documented that you've had
5 eight chicks successfully grow out on the entire
6 Shell Key that's been monitored since then, and as I
7 read the plan, it doesn't adequately describe what
8 Pinellas County's doing to better utilize Shell Key
9 for its intended use, and, you know, that's a great
10 concern to me that really all we're talking about is
11 twining colonial nest sites as we see them, and then,
12 obviously, they're failing.

13 So there must be a bigger reason for these
14 failures to occur, and I really think that we need a
15 better description of what's been going on the last 8
16 years when you compare it to the 10 years before
17 that, and then have a plan, include that as part of a
18 plan, and utilize the community to help you to do
19 that, because we all know that you all don't have the
20 dollars to do everything in the plan, but there's
21 some wonderful groups and agencies out there that
22 would be glad to help you out.

23 MR. HARPER: Thank you.

24 Any other comments?

25 MS. PAUL: Steve?

1 MR. HARPER: Yes.

2 MS. PAUL: So, you know, we've been talking
3 about raccoon or coyote control; I'm just wondering
4 has there been an effort to reach out to the Tierra
5 Verde neighbors to make sure that they're controlling
6 their garbage, they're not feeding their dogs
7 outside, you know, all the things that will promote
8 these mesopredators to do well?

9 MR. HARPER: Yeah.

10 MS. RENFROW: So I've been working closely for
11 the past year with Angeline Scott from Fish and
12 Wildlife, who is the coyote person from their
13 Lakeland office that was working with me. We've held
14 two workshops on Tierra Verde; we've disseminated
15 information both through the community association
16 email database and we have information posted on our
17 website; and we now use the Nextdoor App as well to
18 post information. We over and over and over again
19 reiterate to the residents of Tierra Verde to secure
20 their garbage, do not leave dog food or dog bowls
21 outside, do not have outdoor cats, and to, if at all
22 possible, keep their palms trimmed as frequently as
23 they can because that's another food source for the
24 coyotes, and we're doing everything that we possibly
25 can to educate them that they will stay in our

1 neighborhood as long as there is a food source.

2 MS. PAUL: Thank you.

3 MR. HARPER: All right. Any other questions?

4 Yes.

5 MS. BURKE: Just building on Peter's point
6 earlier, the numbers -- I concur the numbers that are
7 provided in the report about the numbers of birds
8 that are successfully nesting is concerning, and I
9 think that it's either that birds are starting to
10 utilize nearby islands -- you know, whether it's
11 Outback Key or other resources -- or there's a real
12 problem that needs to be -- it's calling out for a
13 response. So either there's additional research
14 that's needed to understand what's going on here, or
15 specific management actions with regard to some of
16 the conflicting uses and predators, and I don't think
17 that the plan goes into sufficient detail to really
18 address what I think it has identified as something
19 we should be concerned about for management purposes
20 of this resource.

21 MR. HARPER: Thank you.

22 MS. DAVIDEK: If I understood the report
23 correctly, something that's kind of interesting to me
24 is that the turtle nesting's gone the other way. So
25 the turtles are doing much better out there and the

1 birds are doing a lot worse.

2 MS. BURKE: I think -- can I just -- since I was
3 at the meeting last week, one of the things that came
4 up as a result of that meeting, they said that they
5 think it's just that the reporting is up because the
6 Turtle Trackers have been out there in such great
7 numbers, and so I think it's comparing apples to
8 oranges when it comes to the turtles nesting.

9 MR. HARPER: I'm not sure that we said that last
10 week, but when we get to the data, we can look at it
11 a little more closely.

12 MR. FAULKENSTEIN: I think the very unique
13 thing, especially with the black skimmers, is that
14 they've now taken up residence on a beach that will
15 have 5 to 10 thousand people visiting it on a
16 weekend, so there has to be something else wrong at
17 Shell Key, and we keep going around in circles again
18 with the coyote situation.

19 And by the way, the situation with Shell Key
20 with the nesting data, I would say I can remember
21 going to Shell Key and getting one and two nests, I
22 can remember going on St. Pete Beach and getting two
23 and three nests. I've been doing this since '78 and
24 there has been just an incredible increase, and I
25 wouldn't say that it was just because of better

1 participation, I would say that the county's allowed
2 us much better access, and the fact that we have a
3 lot more volunteers now.

4 MR. HARPER: Thank you.

5 MR. CLARK: Just to follow up a little bit more,
6 I'm a little concerned. There's some real issues
7 that I think we're starting to identify around the
8 table, and one of my concerns is that you're going to
9 take these, write them down as notes, put them in the
10 appendix and try to rush this plan through with the
11 County Commission, and I believe, as a member of this
12 group, that there still needs a lot of work that
13 needs to be done, especially as I hear other members
14 talking about it.

15 Just to go back on the bird issue, there
16 probably is a number of reasons why Shell Key is
17 failing historically, and as Maya indicated, you
18 know, it's a regional problem, it's not just Shell
19 Key, and in order for us to better understand that,
20 we need to look at what's happening at Outback, Fort
21 DeSoto -- you know, they've got some closed areas
22 there, but also Egmont Key is a major colonial
23 shorebird nest site too.

24 And if you look at those in balance as a whole,
25 you may find the answers there, but if we look at

1 Shell Key in isolation, you know, we may be look --
2 we don't have the full story. So I think it's
3 important that we revisit this if you want it to be
4 successful out at Shell Key.

5 MR. HARPER: Thank you.

6 All right. Let's move on to the next topic.

7 MS. LEISURE: Okay. Forest management. This is
8 one of those topics that the State requires us to put
9 in the plan. There's a lot of that and this happens
10 to be one of them.

11 The objective is to utilize forest management
12 techniques. Specifically, prescribed fires to
13 maintain natural communities on Shell Key.

14 While there are forest resources to manage Shell
15 Key, we continue to evaluate the ecological needs to
16 introduce prescribed fire to maintain certain areas.

17 MR. HARPER: Sorry.

18 Any comments or questions about the forest
19 management section?

20 All right.

21 Oh, Peter.

22 MR. CLARK: I got a question on each one.

23 Have you had a controlled burn on Shell Key?

24 MR. HARPER: We have not had a controlled burn.

25 MS. LEISURE: We don't have the fuel to run it

1 through.

2 MR. HARPER: We haven't had the fuel to -- did
3 you get that? Did you hear what she said?

4 MR. CLARK: I did.

5 Do you plan on doing one in the camping area,
6 sandspur control?

7 MS. LEISURE: That's why it's in there. If we
8 can actually do that and have enough fuel to go
9 through there, we will do that. We didn't have it in
10 the last plan so we put it in this plan.

11 MR. HARPER: Are we ready to move on?

12 MS. LEISURE: Monitoring.

13 Okay. Our objective is to conduct studies and
14 support the work of others to monitor the natural
15 resources of Shell Key Preserve.

16 Staff limitations prevent us from monitoring
17 shorebird nesting as extensively as we did in the
18 past. We rely on our partners and volunteers to
19 conduct monthly surveys. Sea Turtle Trackers and
20 Shell Key Shuttle staff also report any potential
21 nesting on -- to PCR. Results are entered in the
22 Florida shorebird database maintained by the Florida
23 Fish and Wildlife Conservation Commission.

24 Nesting outside the bird preservation area is
25 reported to staff for posting to limit human

1 disturbances. Volunteers and staff monitor all sites
2 until the fate of the nest -- of the nesting attempts
3 have been determined.

4 As shown in the table, nesting attempts have
5 been sporadic over this time period. Reconfiguration
6 of the island may have led to a reduction in nesting
7 attempts in the last few years, especially for
8 colonial nesting species. Historically, black
9 skimmers nested in large numbers in the bird
10 preservation area along the beach of the northern
11 portion of that western shoreline just outside the
12 bird preservation area.

13 The beach in this area no longer exist and it is
14 now beach dune, which is not suitable habitat for
15 beach nesting birds.

16 Not all nesting attempts were successful.
17 Several factors contributed to failures of nests.
18 Documented sources of failure were over washed from
19 severe storms, predation and disturbance by avian and
20 terrestrial predators, and disturbances from dogs and
21 humans.

22 Sea Turtle Trackers conduct daily early morning
23 surveys of Shell Key to preserve fresh crawls and
24 early nesting activity. Volunteers immediately
25 install the protective cage that I showed you earlier

1 over the nest site.

2 The Florida Fish and Wildlife Conservation
3 Commission recorded 219 loggerhead nests and one
4 green sea turtle nest on the island from 2008 through
5 2016. The data indicates that despite differences in
6 the amount of monitoring, there have been a steady
7 increase in the number of nests.

8 PCR will continue to provide support to the
9 Florida Fish and Wildlife Conservation Commission and
10 the Sea Turtle Trackers.

11 The Florida Fish and Wildlife Conservation
12 Commissions. Fish and Wildlife Resource Institute's
13 Fisheries Independent Monitoring Program has been
14 sampling Tampa Bay since 1996, and three types of
15 sampling gear were used within the boundaries of
16 Shell Key Preserve from 2008 through 2015. A hundred
17 thirteen species of fish have been documented within
18 the preserve, and while this partner has not
19 requested support from PCR, they have provided the
20 data upon our request.

21 Pinellas County Public Works Environmental
22 Management decision to monitor water quality within
23 the preserve. Overall the water quality within the
24 preserve is very good and has consistently remained
25 so. Chlorophyll is an indicator of a growth in the

1 water column and excess nitrogen in the water column
2 can contribute to increases in the chlorophyll.

3 For Boca Ciega Bay, which the preserve is found,
4 state adopted threshold concentration for total
5 nitrogen is .54 milligrams per liter, and that's the
6 red line that you see on this chart, on this graph,
7 and for chlorophyll A it's 6.3 micrograms per liter,
8 which is on this green line.

9 For each aggregated sample period, until
10 nitrogen and chlorophyll A values fell below and in
11 compliance with these water quality thresholds, each
12 dot on the map represents a randomly selected site
13 and the color indicates the year the sample was
14 collected. Over time, using this consistent
15 monitoring approach, we've detected no change in
16 water quality since the closure of the northeast tip
17 in 2015.

18 In 2016 the annual average of -- for total
19 nitrogen was 0.51 milligrams per liter, which, again,
20 is below that threshold, and for chlorophyll A it was
21 2.2 micrograms per liter.

22 MR. MARKHAM: Ma'am? What months of the year
23 are those tests being done?

24 MS. LEISURE: Sorry.

25 MS. LEVY: We collect water quality samples year

1 round, but specifically I'd have to go and look
2 because it's all random.

3 MR. MARKHAM: That's going to vary depending on
4 what month it's taken based upon the temperature of
5 the water.

6 MS. LEVY: Yes, of course, that's why we monitor
7 year round, so we can get an annual picture of what
8 the water quality looks like, not just in January,
9 but also in July, and by doing it randomly and not
10 specifying when we're out there, we're not biasing
11 the data. So our sampling locations are selected by
12 computer and the times that we're out there are also
13 selected by computer, so that way we're not -- we're
14 not influencing the data in any way.

15 MR. MARKHAM: If you're doing periodic samples
16 at certain locations, wouldn't it behoove you to do
17 it at the same time each year so that you get a more,
18 you know, logical picture of what's really going on?

19 MS. LEVY: Well, the thing with any type of
20 monitoring data -- monitoring strategy is you have to
21 know what questions you want to answer. In our
22 particular case, our goal was to assess water quality
23 longterm, to look at health in the longterm way, and
24 to be able to look at it geographically through the
25 geographic area. So by doing it randomly, we can say

1 that the water quality, like the nitrogen values that
2 Pam gave, are consistent throughout that area.

3 If we go back to the same place every time and
4 collect data at that one point every time, all we can
5 say is that at that one place the nitrogen was X. We
6 can't say anything about the preserve as a whole, and
7 so that's why we have a random monitoring strategy,
8 because it takes out that sampling bias that going to
9 the same point every single time puts into the
10 monitoring.

11 MR. MARKHAM: But water temperature is not
12 monitored along with that?

13 MS. LEVY: Yes, water temperature is also
14 monitored.

15 MR. MARKHAM: Okay.

16 MS. LEVY: In the report there's a paragraph
17 that includes all of the monitoring parameters that
18 we include, which include both physical parameters
19 like temperature, water clarity, salinity, pH, as
20 well as the more chemical parameters, such as the
21 various nutrients, chlorophyll, biological oxygen
22 demand and other parameters that we collect.

23 MS. LEISURE: Seagrasses are also biological
24 indicators of ecosystem health, and as chlorophyll A
25 increases, water clarity is reduced, and when water

1 clarity is poor, seagrasses can get -- can't get the
2 light to grow and thrive. By reducing nutrient
3 loads, algal growth is limited and water clarity is
4 increased, which results in healthier seagrass beds.

5 Southwest Florida Water Management District's
6 aerial surveys found in 2008 there were 870 acres of
7 seagrass in the preserve. Between 2008 and 2016 the
8 preserve showed a net gain of an additional
9 114 acres, indicating healthy aquatic system, and if
10 you look at this, the yellow area, that's the
11 increase in the seagrasses that occurred in that time
12 frame, where the orange or red indicates the losses,
13 and that's that net gain of 114 acres.

14 MR. HARPER: Okay. Any questions or comments on
15 the monitoring section?

16 Let's start on this end.

17 MS. DAVIDEK: I just want to say that we do --
18 when we see nesting going on, we do let Pam know and
19 the county is always extremely responsive and out
20 there within a day to cordon off the areas if they're
21 nesting outside of the bird preserve areas, and I
22 also think -- and this would be a question for the
23 Audubon people, because that island has changed so
24 dramatically. I mean, so dramatically. We've been
25 doing this for nine years.

1 Perhaps part of the bird thing is like she
2 touched on, is because of the habitat has changed,
3 and maybe that's why the skimmers are on the island
4 next over, not that Shell Key is, oh my God, dying,
5 dying, dying. Maybe it's just that the configuration
6 of the island has changed to the extent that certain
7 birds aren't happy there anymore, because when you
8 look at these least terns, their numbers have been
9 great the last couple years. That's after the land
10 bridge.

11 So I just think it might be interesting to look
12 at the changes in the shoreline and maybe address the
13 concerns of how has that affected some of these birds
14 that historically have gone there.

15 MS. RENFROW: I wanted to revisit the water
16 quality issue.

17 As I view the chart that's being included as the
18 draft for the next plan, I see only for 2016 one test
19 site on that map, and it is at the southern end of
20 the preserve, almost in Bunces Pass, and I liked --
21 I'm not -- first of all, let me say I'm not a
22 scientist and I don't play one on TV, but I walk
23 Shell Key regularly and I talk to residents in West
24 Shore regularly, and I get phone calls from residents
25 in West Shore regularly, and way up there in the

1 inlet that's up towards the northern end, in the
2 summer there's decreased water quality. The stench
3 is terrible. There's no water flow up in there at
4 all. I don't understand how that could be considered
5 healthy water quality.

6 I would like to know what the county dedicates
7 annually in its budget for testing water quality at
8 this specific preserve.

9 MR. HARPER: We may have to get that information
10 to you.

11 MS. LEVY: Yeah, I mean --

12 MR. HARPER: That would be a hard question
13 because, as Kelly mentioned, it's a regional --

14 MS. LEVY: Yeah, I mean, it cost about -- I
15 mean, just lab fees are around \$150 per sample.
16 That's just the lab fees, and you're talking about us
17 having boats and people. We have sound equipment and
18 water clarity equipment and other pieces of equipment
19 that we take out there, so I have to basically
20 calculate what it cost to do a run out there.

21 MS. RENFROW: No, what is your budget --

22 MS. LEVY: Our budget, well, again --

23 MS. RENFROW: -- for testing that area?

24 MS. LEVY: Again, we monitor the entire county,
25 so our annual monitoring program is over almost a

1 million dollars a year, and we monitor all of the
2 estuarian waters from the Anclote Reserve south and
3 up into Tampa Bay, and all lakes and streams, so I'd
4 have to like break that out as a unit, but it's
5 almost a million dollars a year.

6 MS. RENFROW: And you just test that site once a
7 year?

8 MS. LEVY: No, I was just going to check, and I
9 don't know, Pam, if you have --

10 MS. RENFROW: There's just one random site
11 tested in that reserve area in a year?

12 MS. LEVY: I was just trying to pull up. Let me
13 see if I can find out. One second.

14 MS. RENFROW: And it's not done at the same time
15 every year?

16 MR. HARPER: They're random times, as she
17 mentioned earlier.

18 MS. LEVY: Let me see if I can find that.

19 MS. RENFROW: It would help to have the random
20 time associated with the year, the month and the
21 year.

22 MR. HARPER: Yeah, those are aggregates over
23 multiple years, if that's --

24 MS. RENFROW: Well, for instance, in 2016 what
25 month was that tested?

1 MR. HARPER: Oh, I see what you're saying.

2 MS. RENFROW: Looking at the black, which was
3 2009 --

4 MS. LEISURE: Nine.

5 MS. RENFROW: -- what month was that tested?

6 MS. LEISURE: There's one/two/three/four samples
7 there.

8 MS. LEVY: Yeah, that's what I thought, there
9 were four in the preserve in '16.

10 MR. HARPER: Okay. Other questions?

11 MS. RENFROW: There's actually two tests in
12 2009. There's only one in '16.

13 MS. LEISURE: There's four.

14 MR. SAVERCOOL: I mentioned this last week off
15 the record; I'll say it here.

16 In regards to the randomization of the water
17 quality sample station locations and the now
18 impending desire or concern about dredging the inlet
19 again, right now your station locations are not
20 adequate to support any conclusion, whether dredging
21 the inlet will support or degrade water quality.

22 I appreciate the randomness for a nice snapshot
23 overview, but your error, your degrees of freedom,
24 are too high to make management decisions --

25 MS. LEVY: We have --

1 MR. SAVERCOOL: -- given the protocol that you
2 have.

3 MR. HARPER: Hold on a second.

4 MS. LEVY: The inlet management study that
5 Dr. Ping Wang is doing from the University of South
6 Florida is going to look at what types of changes, if
7 any, that changing that channel in there will do as
8 far as circulation goes, as far as the ability to
9 maintain an open area, but what we are saying is that
10 the water quality within the preserve is healthy.

11 We have been monitoring the preserve since 1991
12 and there has been no appreciable changes in water
13 quality with regard to nitrogen and chlorophyll,
14 dissolved oxygen, any of the parameters that we
15 monitor for and have over several decades now. And
16 the fact that the seagrasses have continued to
17 proliferate and to expand and grow -- seagrasses are
18 an indicator of good water quality. We would not
19 have an additional over a hundred acres of seagrasses
20 if the water quality was degrading within the
21 preserve.

22 MR. SAVERCOOL: I guess my point is, if the
23 closing of the inlet now is a game changer and the
24 monitoring is -- most likely, the water quality will
25 drop.

1 MS. LEVY: Well, my understanding is that that
2 pass closed in about 2015 and right now we're not --
3 there's no data to support that conclusion.

4 MR. MARKHAM: It's closed.

5 MR. HARPER: That's true.

6 MR. CLARK: But I don't think we're sampling up
7 there in order to be able to tell that, and that's
8 what Dan is saying --

9 MS. RENFROW: That's my point.

10 MR. CLARK: -- is you've randomly selected
11 computer-based sites, and they could be any time of
12 the year, also based on randomness, and we just don't
13 know if water quality is changing up there because
14 we're not really monitoring for those kind of
15 changing conditions.

16 Unless I'm wrong. Maybe we have done some
17 additional monitoring.

18 MS. LEVY: We have deployed sondes all up in
19 that north area, deployed sondes for 20 of her
20 posts -- two weeks at a time. We're not seeing any
21 appreciable changes in water quality and we've done
22 it for months now. We've done it -- we've done it
23 after that first public meeting that we had, we've
24 just been deploying sondes all up in that north area
25 only and have --

1 MR. HARPER: She --

2 MR. SAVERCOOL: We need more dots on the map,
3 then, because right now what you're saying is not
4 illustrated there.

5 MS. LEVY: When I say sondes, I mean, these are
6 pieces of equipment that every 15 minutes take
7 readings in the water colony, and we have sondes all
8 up in the north area, and then we put one in a
9 control area.

10 We are not seeing any differences.

11 And, Pam, if you could pull up the seagrass map.

12 Again, because I'd like to go back to the
13 indicator of health.

14 UNIDENTIFIED WOMAN IN AUDIENCE: What parameters
15 were your sondes testing, just pH and temperature?

16 MS. LEVY: PH, dissolved oxygen, salinity,
17 temperature, and we have some that do chlorophyll,
18 depth, and I think that's it.

19 UNIDENTIFIED WOMAN IN AUDIENCE: And what season
20 were those out?

21 MS. LEVY: Many months of the year. It started,
22 I think, in April.

23 UNIDENTIFIED WOMAN IN AUDIENCE: Can you tell us
24 when, because there's the certain like nutrient
25 criteria that's in place and I'm just curious about

1 when you were out there?

2 MS. LEVY: Again, the sondes have been out on
3 and off starting in April;
4 April/May/June/July/August/September they've been
5 out. We have -- this area meets the numeric nutrient
6 criteria, which are up there on the water quality;
7 those are the red lines that we put up there. Those
8 are the state adopted numeric nutrient criteria for
9 Tampa Bay, and this particular segment is Boca Ciega
10 Bay. They're adopted criteria specifically for Boca
11 Ciega Bay and those are those criteria.

12 And so back to the seagrass, look there at the
13 north end. When we see that the seagrasses are doing
14 well, this is another indicator of health. As Pam
15 mentioned, the seagrasses cannot thrive without
16 exceptional water quality. Good water quality equals
17 good water clarity, and then seagrasses do well.

18 When the water is turbid, seagrasses die off,
19 and that's when we saw in Tampa Bay for decades, and
20 here now in this particular area we're seeing
21 expansion of seagrass beds, and that is a very good
22 thing.

23 MR. CLARK: So I really urge that that
24 additional staff can be included in the management
25 plan. I think there's a concern within the Tierra

1 Verde community that they're not really sampling the
2 water quality in that area to see the changes since
3 the pass has closed, but a particular note would be
4 chlorophyll A. That's the only one that's really
5 indicative of stagnation that could occur up there.

6 MR. HARPER: Temperature --

7 MR. CLARK: Temperature, yep.

8 MR. HARPER: -- DO, alls of those would be.

9 MR. CLARK: But, again, you know, seagrasses are
10 doing pretty good up there. I was there over the
11 weekend and there are generally patches of grass,
12 patchy grass, but it looks pretty -- like it is
13 growing, starting to grow up there continually, so
14 that's very valuable information.

15 On this chart here it doesn't show where those
16 gains -- if they're solid or if they're patchy. I
17 think that's very useful, because in the future that
18 may change, it may become solid, or it may start to
19 dissolve away, but just saying that there's a change
20 occurring in that location isn't necessarily telling
21 the reader what's occurring up there naturally.

22 But, also, I think some of the losses in
23 seagrasses -- it's important to emphasize that that
24 sand movement in a lot of those areas were a change
25 from open water to salt marsh and mangroves and

1 things like that.

2 MR. HARPER: Okay.

3 MR. MARKHAM: If you take a look at where you're
4 calling the inlet, I was up there and it had closed
5 up. Just south of that little inlet there water
6 depth was maybe six inches to a foot. Water
7 temperature at the time that I was up there, and this
8 has probably been a couple months ago, was
9 96 degrees.

10 Now, north of that, if you go in Pass-a-Grille
11 channel, that water temperature 20 feet away was
12 89.8, okay, so there's a huge difference between
13 that, and I've got to say that if you've got high
14 water temperature, you're not going to have a
15 dissolved oxygen content that you've got in the
16 cooler water. It just doesn't hold it.

17 So the same thing goes. I mean, turbidity,
18 you're going to have more turbidity on the north side
19 because you have water movement, water flow. I mean,
20 when you have calm water, everything settles. So,
21 you know, when you open it up, you're going to start
22 creating different scenarios for things that are
23 going to happen.

24 This whole island, 30 years ago you'd be able to
25 run through here. There used to be, you know,

1 three/four foot water depth and this was covered with
2 grass. I mean, you see patches of it now, but, I
3 mean, it was covered with grass. There was a lot of
4 fish in there. There really aren't a lot of fish in
5 there now because the water temperature's just too
6 high.

7 MR. HARPER: Other questions for monitoring?

8 MS. RENFROW: I just want to reiterate that I
9 think that this again to me indicates that the county
10 should not rush this new management plan, that they
11 should also include any data that's gained from
12 Dr. Wang's study.

13 MR. HARPER: Thank you.

14 MR. CLARK: Question would be what kind of
15 monitoring for manatees has been continuously
16 recorded over the years?

17 I do know that Pinellas County for a long time
18 was tracking manatee usage within Shell Key Preserve,
19 and that's one of the things that I've noticed in
20 decline since the path has closed, is the manatees
21 aren't using the northern part or the southern part
22 as much as they used to, but I want to be able to see
23 if that's been documented by Pinellas County or
24 someone else.

25 MR. HARPER: We've not documented manatees over

1 time.

2 MS. LEISURE: Well -- Steve?

3 Peter, that was done just by people calling
4 those in, so it wasn't actual county out there doing
5 anything. It totally relies on people knowing about
6 it, and I don't think it's promoted like it used to
7 be.

8 MS. LEVY: We do still have the manatee
9 reporting available on our website and we do track
10 and report that data to the state. So -- and we have
11 a manatee viewer, it's on our GIS, so it's available
12 to the public. You can go in there and see where
13 manatees have been reported. We try to get that word
14 out because we are -- we are very much dependent on
15 the voters and the folks who are out there who see
16 them to report them to us.

17 MR. HARPER: Obviously, it would be very
18 challenging to compare over time in the north end if
19 it's not accessible to boats so . . .

20 MR. CLARK: Yeah, that's true.

21 The information would be valuable to include in
22 the report, though.

23 MR. HARPER: I think that -- I appreciate that.

24 MR. CLARK: But you're right, if the boaters are
25 reduced up there --

1 MR. HARPER: But that's the source of the data,
2 so they can't get back there.

3 Other questions on monitoring?

4 All right. Moving right along.

5 MS. LEISURE: Okay. The next section is
6 research. The objective is to coordinate and support
7 scientific studies conducted at Shell Key Preserve by
8 researchers from partnering agencies and other
9 institutions, and use information provided to support
10 management decisions.

11 Research studies will continue to be encouraged
12 and supported to the fullest extent possible through
13 partnerships, through scientists from external
14 agencies and institutions. Numerous projects have
15 been conducted at the preserve, including two that
16 studied impacts to board species and involved banding
17 individual birds.

18 As mentioned earlier, Dr. Ping Wang and
19 colleagues are completing an inlet management study
20 for Bunces Pass and Pass-a-Grille. Scientists are
21 developing models to detail the extent of the budget
22 and capture relevant field parameters, including
23 asymmetry, settlement characteristics, meteorological
24 conditions, ocean currents and wave dynamics.

25 Multiple model runs will be completed to evaluate

1 alternative strategies for inlet management,
2 including dredging options. Results of the study
3 will allow us to compare the feasibility and cost
4 effectiveness of alternative strategies to address
5 closure of the north pass. It will also help us
6 better understand how reopening the channel will
7 influence circulation in the eastern waters of the
8 preserve.

9 MR. HARPER: Okay. So we partnered with
10 researchers from local institutions, as well as
11 institutions throughout the country, and occasionally
12 internationally that are interested in doing research
13 on our preserves and parks and management areas
14 throughout the county, and this benefits us from a
15 management perspective because we have access to
16 these types of research studies that would be beyond
17 the scope of what local government could provide. So
18 this was just a handful of -- example.

19 Obviously, Dr. Wang's study is of importance to
20 a number of people with the dredging issues that are
21 going on. So this would be -- I would suggest this
22 is the time to address your dredging concerns or
23 comments or questions, as well as any other
24 research-related questions.

25 MR. MARKHAM: I look at what's been done with

1 the most major channels or inlets, if you want to
2 call them that, coming out of the land side going out
3 into the Gulf. For an example, New Pass, Big
4 Sarasota Pass, Longboat Pass, almost every pass
5 that's being dredged out, they dredge east and west.

6 Mother Nature doesn't want that. Mother Nature
7 wants southwest and northeast. So every time they do
8 that, you end up with Shell Key over at Bunces Pass.

9 MS. RENFROW: This is obviously an issue that's
10 extremely important to the Tierra Verde Community
11 Association. We have residents whose lives have been
12 impacted by this issue and, again, I think it's
13 really important for the information that's being
14 gathered and the data by this study be included with
15 the management plan so that it gives a clearer
16 picture of what the dynamics are of what is going on
17 in this preserve area in terms of the currents and
18 the accumulation of sand or the deterioration of sand
19 buildup in certain areas as well. And I also would
20 love to maybe have a resource included in the
21 management plan that gave a list of all the studies
22 that had taken place in the previous years back to
23 2007 so that people would have a point of reference.

24 MR. HARPER: That is in the plan.

25 MR. CLARK: So I want to reiterate what Mary Ann

1 just said.

2 This is such a huge study and it affects so many
3 facets of the Shell Key Management Plan that the
4 county has been holding off on making a lot of
5 different recommendations until Dr. Wang's study is
6 completed. Can't we just put the brakes on the
7 management plan a little bit longer so that we can
8 see what these top researchers come up with in terms
9 of recommendations that will benefit Shell Key, as
10 well as give us a better understanding of what the
11 next 10 years is going to look like for the
12 management plan. So I strongly urge Pinellas County
13 to slow down and wait for the results of the plan and
14 have a public discussion on the plan so that we
15 can -- we can do a better job of dialing in the needs
16 that the Shell Key Aquatic Reserve truly deserves.

17 What is the time line now for the results of
18 that plan?

19 MR. HARPER: We hope to get that by the end of
20 this year.

21 MS. LEVY: November is still the time line.

22 MR. CLARK: I thought it was October for some
23 reason.

24 MS. LEVY: That's for the TAC 3 report and there
25 will be another TAC meeting, the third Technical

1 Advisory Committee meeting, scheduled towards the end
2 of October to discuss the TAC 3 results, which is a
3 lot of the modeling, finishing the modeling runs, as
4 well as looking at those two priority areas, which is
5 the north end there of Shell Key, as well as Mullet
6 Key, the area impacted at Fort DeSoto. And so we'll
7 be having another TAC meeting at the end of next
8 month and then finishing up the report in November.

9 MR. CLARK: Just as a follow up, if I could, do
10 you have any kind of legislative requirement that you
11 have to get this in within --

12 MR. HARPER: Yes.

13 MR. CLARK: -- a 10-year time frame?

14 MS. LEISURE: Yes.

15 MR. CLARK: Would it be possible to ask for an
16 extension because of the study?

17 MR. HARPER: Just -- from our perspective, it's
18 just one aspect of the -- the dredging is just one
19 aspect of many facets as you've seen in the preserve.
20 So there's nothing that precludes us from including
21 it as an addendum after the fact. It's really not
22 impacting our management strategy, because say Wang's
23 study came back with a strong recommendation that
24 this type of dredge -- we know the maintenance dredge
25 won't work, right, because it was tried before.

1 I'm not sure the orientation would help or not,
2 that has been discussed at times, but we know it was
3 filling in as they were dredging it, so that clearly
4 is not an option. So if it's a bigger, more
5 substantial dredge, it might involve hardening of
6 structures. So then you open up a time line of years
7 for anything to actually happen because you have to
8 secure the permits from state and federal agencies,
9 you need to secure the funding, which is a
10 significant thing, you have to do the political
11 considerations, as Commissioner Justice might be able
12 to expand upon, but, you know, if you start dredging
13 one pass, there are probably a long line of people
14 that would probably like you to dredge their pass as
15 well.

16 So there are a lot of considerations, so I don't
17 think we're going to have the answer that you're
18 looking for in November or the end of the year. So I
19 don't think it impacts the management plan as
20 directly as you're leading to believe.

21 MR. CLARK: But we're not sure because we
22 haven't seen the results, and I know we don't want to
23 hold off on the management plan until a pass gets
24 dredged if they do recommend it.

25 MR. HARPER: Yeah.

1 MR. CLARK: But I think the study itself is
2 going to provide a lot of information on sand
3 movement --

4 MR. HARPER: Absolutely.

5 MR. CLARK: -- hydrological flows, possibly
6 enhancing the bird nesting, predators out on the
7 island.

8 MR. HARPER: I don't think there's anything in
9 the plan currently that would preclude us from doing
10 any of the recommendations that the study might
11 recommend.

12 MR. CLARK: It might give you some more answers
13 is my point.

14 MR. HARPER: Potentially, but like I said, it's
15 not going to impact our management directly because
16 we're still looking at -- I can promise you it would
17 be years before anything would actually happen.

18 MR. CLARK: Certainly. Yeah.

19 MR. SAVERCOOL: Two questions. First, in
20 regards to the study, are they looking at structural
21 alternatives in addition to dredging?

22 MR. HARPER: I think he is looking at one
23 hardened scenario.

24 MS. LEVY: I honestly do not -- he was really
25 focussing on what options were -- what options might

1 there be that would -- the bigger question is, can it
2 stay open, under what conditions can it stay open?

3 MR. HARPER: I know the width of the dredge was
4 considered.

5 MS. LEVY: Yeah, and what -- so he's looking at
6 multiple different -- I don't want to just say he's
7 looking at hardening. He's looking at width; he's
8 looking at multiple different scenarios, because it
9 may not be any one thing. It may be a combination of
10 things that ultimately leads to an answer.

11 MR. HARPER: But certainly gaining insight -- as
12 Peter said, gaining insight to the system is really
13 what it's all about. So it may be that this study
14 doesn't address specifically -- we might want to do
15 an orientation study, we might want to do a hardening
16 study, but once we have a model and we have it
17 parametrized and we have a field validated, then we
18 can look at -- explore our alternative scenarios.

19 We'd have to hire an additional, you know,
20 contract -- additional contract to do something like
21 that, but, you know, we have the tool at our disposal
22 then to start looking at alternative scenarios, but
23 in terms of impacting our direct management decisions
24 on a day-to-day basis, this study is not going to do
25 that.

1 MR. SAVERCOOL: So you're under a legislative
2 mandate for the schedule of this version of the
3 management plan, and it's been quite a few years
4 since the previous version of the management plan,
5 and in between you've done a lot of surveys, and
6 research has been conducted, and you've undertaken
7 some actions, and your management plan hasn't been
8 tweaked in the meantime. Is there an opportunity to
9 have annual updates to the plan, minor tweaks that
10 recognizes the data that you've collected this past
11 season?

12 MR. HARPER: Well, we do have some flexibility
13 in our management limitations, so minor tweaks will
14 probably not work with the legislative and
15 bureaucratic hurdles that we have to go through to
16 change the plan.

17 One example of that is the lighting with the sea
18 turtles. We, at the recommendation of the state,
19 reviewed -- so we got management reviews as well from
20 the state, right?

21 So they come down; they review the management
22 plan. Independently of the board of the ARC
23 commission, a different panel of local experts and
24 regional experts come and evaluate our management,
25 and they also do management recommendations.

1 So one of those recommendations was to prohibit
2 campfires because of the light pollution at certain
3 times of the year for the -- to protect the beach
4 nesting sea turtles, and so we did implement that
5 change. That's something within our prerogative that
6 we don't have to really do that. If there was
7 something significant related to dredging, I can -- I
8 can almost promise that there will be plenty of
9 public hearings and public comment that would involve
10 that.

11 Again, I'm not sure that it directly affects the
12 management plan, but it could, and if we would update
13 it to that extent, that would be the time to do that.

14 MR. SAVERCOOL: So there's an opportunity to
15 continue -- well, you have to continue with the
16 existing schedule, but once a study is released and
17 debated and ruminated and those objectives and
18 actions come out of that, you have the ability to
19 revise this plan to some degree to capture those --
20 that new information.

21 MR. HARPER: If it's warranted, sure.

22 MS. DAVIDEK: We did that in 2007.

23 MR. HARPER: Correct.

24 Well, that was an update, but, yes.

25 MS. DAVIDEK: But it wasn't 10 years.

1 MR. HARPER: It wasn't 10 years, correct, yeah,
2 so . . .

3 MR. MARKHAM: It just kind of seems to me, you
4 know, that you're basing a lot of things on current
5 data and this stuff changes all the time. What's
6 here now wasn't here 10 years ago, and 10 years from
7 now all this stuff that you're getting data on is
8 going to be different. It's going to change, okay?

9 You can change, you know, the depth of an inlet
10 or whatever, and that's got to make another change
11 somewhere else. I guarantee you those people that
12 drowned that were in Pass-a-Grille channel, part of
13 it had to do with the fact that that water rips
14 through there and it was on a -- I can't remember, a
15 new or full moon. On an afternoon new or full moon
16 you've got an outgoing tide that rips, and I'm
17 telling you, it runs through there. If you open that
18 inlet, I guarantee you that the water won't run so
19 hard out of there, but it will go in another
20 direction because it's got another way to go, okay,
21 and when it starts going that way, it's going to
22 start carrying sand and everything else with it, and
23 all this stuff that you've got going on right now,
24 all these facts and figures and everything are gonna
25 change, okay? It's going to change.

1 So 10 years from now what we're doing won't
2 matter. You got another hurricane, it's going to
3 change the next time the hurricane comes through.

4 MR. CLARK: Yeah, I was going to say, just look
5 at how much it's changed in two weeks.

6 MR. HARPER: It's an incredibly dynamic system,
7 I would agree with you there.

8 I think, to sort of address your concern about
9 the currents and riptide there, that's precisely one
10 of the factors that will be revealed through this
11 modeling exercise. To the extent that you believe or
12 trust the model, those, both the incoming and
13 outgoing tide, shows the velocity at various points
14 throughout the study area, and that will include the
15 theoretical opening of the pass that will be the
16 consequences of that south of Pass-a-Grille.

17 MS. PAUL: So while we talk about this dynamic
18 system, you know, I just want to talk a little bit
19 about what Nancy was saying about how the shoreline
20 is changed and now we have birds nesting out on
21 Outback Key, and I would really like to encourage the
22 county to approach the state of Florida through their
23 Pinellas Aquatic Preserve management or not, whatever
24 they're not doing or not doing out at Outback Key,
25 and let's -- let's have Shell Key Preserve include

1 that natural resources out there so that proper
2 management of that -- I know FWC has done tremendous
3 work with the volunteers this year to protect the
4 beach nesting birds out on Outback Key, but we do
5 have a lot of -- but a lot of the party people that
6 used to be a problem at Shell Key are now, you know,
7 pretty freewheeling out at Outback Key, and I think
8 it's -- I don't want to interfere with anybody's good
9 time, but I do think that -- that including all of
10 these resources under one umbrella that's properly
11 managed would be so smart.

12 MR. HARPER: Right.

13 So for tonight we have to focus on the Shell Key
14 Preserve since that's the property that we're
15 updating our plan for, but you're right, we do
16 obviously work closely with Jim Wilson and the staff
17 at Fort DeSoto and their volunteers. We have
18 communicated with the state, especially when we were
19 trying to determine the regulatory capacity of the
20 various entities in terms of providing management to
21 that Outback Key, and it became clear it was the
22 state's land at this point. It would probably
23 require additional research, but my understanding is
24 that when it accretes to Fort DeSoto Park, then it
25 becomes part of the park.

1 Is that correct, Paul?

2 MR. COZZIE: That's not entirely true, no.

3 MR. HARPER: Not entirely true.

4 MR. COZZIE: There's -- and Brendan walked away.

5 MR. HARPER: Yeah, I know.

6 MR. COZZIE: He conveniently walked away, but he
7 did actually mention that to me at the beginning of
8 this meeting that by law the -- even if it evulses to
9 Fort DeSoto's beach, it still would technically be
10 state land, but, of course, there would be
11 opportunities for management agreements and things
12 like that if that was necessary.

13 MR. HARPER: Thank you.

14 MS. PAUL: I was wondering if there could be
15 like an addendum to your lease to the state to kind
16 of manage it together. It might be a good time to
17 talk about it within discussion.

18 MS. BURKE: Yeah, and I think -- we understand
19 that this is the plan for Shell Key, but there's no
20 reason that in that introduction when you're talking,
21 sort of giving the context, that you couldn't at
22 least give some of the bigger regional context so
23 that you can address some of these issues in this
24 plan. Even though it's not specifically about Shell
25 Key, I think this plan would be better if you did

1 some of that and had some of these conversations that
2 forms that introduction part of the plan if nothing
3 else.

4 MR. HARPER: Thank you.

5 Other questions for monitoring?

6 Other questions for monitoring?

7 All right. We're on the homestretch here.

8 MS. LEISURE: Okay. The next section is the
9 cultural resource management. The objective is to
10 identify and protect historic and archeological
11 resources that are supported by the preserve.

12 The Florida Master Site File contains one known
13 archeological site, a shell midden recorded as being
14 in the preserve. It is actually right through here
15 on the island of Tierra Verde.

16 In a conversation with Dr. Robert Austin, who
17 conducted the survey, the midden was found on land in
18 Tierre Verde in close proximity to the brackish water
19 pond. The site most likely lies outside the preserve
20 boundary. As needed, we will coordinate with the
21 Florida Division of Historical Resources prior to
22 allowing any activity which causes ground
23 disturbances in areas with a high probability of
24 supporting cultural resources.

25 MR. HARPER: All right. Any comments or

1 questions concerning cultural resources?

2 Next, security.

3 MR. CLARK: We're in favor of them.

4 MS. LEISURE: Okay. Security.

5 The objective is to enforce rules and
6 regulations as detailed in Pinellas County Code of
7 Ordinances Chapter 90 to protect the natural and
8 cultural resources supported by the preserve.

9 PCR contracts -- as Steve already has talked
10 about, PCR contracts two Pinellas County Sheriff's
11 Office deputies to patrol parks and preserves. The
12 additional support comes from other deputies assigned
13 to the environmental lands and marine unit.

14 Deputies are responsible for enforcement of the
15 county's parks and preserves ordinances, as well as
16 state fishing ordinances. As part of their training,
17 deputies have attended the Audubon Florida
18 Interagency Law Enforcement Workshop, which helps
19 them identify beach nesting bird species and gain an
20 understanding of the importance of protecting the
21 areas posted by staff and volunteers.

22 Communication between the sheriff's officers and
23 myself have proven to be essential for quickly
24 responding to issues that arise in the preserve. For
25 example, in 2016 in December deputies responded to a

1 small fire at Panama Key.

2 That's this area here (indicating.)

3 They continued to provide support for the local
4 fire department until the fire was extinguished.

5 MR. HARPER: Okay. I know security came up a
6 little earlier, but if there are specific questions
7 related to security, now would be the time to bring
8 them up.

9 MS. DAVIDEK: I think we should deputize Mary
10 Ann.

11 MR. HARPER: I would second that.

12 MS. RENFROW: Is this where we address camping?

13 MR. HARPER: There's more. I mean, you can
14 certainly bring up camping --

15 MS. RENFROW: No, I don't want to waste any
16 time.

17 MR. HARPER: -- but there will be a specific
18 camping -- okay.

19 MS. BURKE: No, sorry.

20 This is an item that's specifically addressed in
21 the Tampa Bay CCMP, the Comprehensive Conservation
22 and Management Plan, for Tampa Bay to encourage local
23 government partners to improve and increase
24 enforcement where it's necessary. So I would
25 encourage the county to look for ways to find funding

1 sources to perhaps return some of the five deputies
2 that have been lost since -- since the budget cuts in
3 2008 and on. So just to be consistent with the CCMP,
4 I feel like I need to make that comment.

5 MR. HARPER: Thank you.

6 MR. CLARK: I know the sheriff's department does
7 a really good job of patrolling the area. There
8 continues to be a problem with the commercial
9 fisherman that go back into the closed areas, and I
10 think by enhancing additional support for the
11 sheriff's department, it would help alleviate that.
12 Obviously, they do what they can, but they're out
13 there 24 hours a day, and as long as they know
14 nobody's watching them, they'll sneak back in the
15 closed areas, in and out, and that continues to be a
16 problem.

17 MR. HARPER: Thank you.

18 All right. So now we're going to transition
19 from the management to the public use.

20 MS. LEISURE: Stepping away from resource
21 management, the next section of the plan covers
22 public recreation.

23 Because Shell Key is completely undeveloped, it
24 is of high scenic and recreational value to visitors.
25 So under public access the objective is to provide

1 public access to areas of Shell Key Preserve where
2 compatible with conservation and protection of
3 natural and cultural resources.

4 Areas of access and uses within a preserve have
5 evolved over time as a result of research conducted
6 by Pinellas County staff and others documenting
7 changes to the island's natural resources. Where
8 activities were documented to be incompatible with
9 state mandated goal of protecting natural resources,
10 changes were implemented.

11 As there are a number of zones, it's important
12 that we maintain signs to provide clarity to
13 visitors.

14 Okay. So now I'll just step through this very
15 busy map along with the signs that we have.

16 So along the perimeter we have the boundary
17 posted. It's clearly marked. It says Shell Key
18 Preserve, no pets, no alcohol. Anyone entering there
19 clearly knows no pets, no alcohol, no alcohol beyond
20 that point.

21 Now, step to the island first. This north
22 public use area runs from this tip along the western
23 shoreline to this point.

24 My pointer's not working.

25 To there.

1 That's just public use. People can walk along
2 the shoreline. The red and white hashed area, that's
3 our main core bird preservation area.

4 The area that I -- that -- where we stopped with
5 the -- the public use area, this area along in here
6 is our beach closed area, and it's marked with these
7 yellow -- very bright yellow signs, no trespassing,
8 beach closed, and what that means, if people don't
9 understand that, if your feet are in the water,
10 you're okay. You're not on the beach. If it's -- if
11 it's low tide and you're walking in the same area
12 that you're -- you know, when you first came down the
13 beach, then you're not in compliance with the law.
14 So feet have to be in the water.

15 The southern area, public use, this green and
16 white patch, that's where we have public use where
17 camping is allowed.

18 Now we'll get to the aquatic zones.

19 This whole area is shallow, danger water. It
20 just means that you have a need to go slow and be
21 cautious because this is very shallow water and we're
22 protecting our seagrass beds in here.

23 This area along this eastern shoreline is
24 minimum wake in that channel, and it's clearly marked
25 as well. This middle area, the little bluish area,

1 that's our no internal combustion engines, and,
2 again, it's a shallow area where we're protecting the
3 grass beds. You can pull and troll through those
4 areas.

5 And this northern area and this area in here,
6 those were established as idle speed/minimum wake
7 areas, and then finally we have this little mudflat
8 area is our no entry zone, and it's very clear just
9 no entry.

10 MR. CLARK: Nothing.

11 MS. LEISURE: Not on foot, not on canoe.

12 MR. CLARK: Zippo.

13 MS. LEISURE: Thank you.

14 And so I talked a lot about the seagrasses, the
15 signs and the seagrasses, and Kelly provided this
16 data that show seagrass prop scars from 2008 to 2016.
17 It fish ties into the map and all of the prop
18 scars -- they found almost 400,000 linear feet of
19 prop scars when you add all that together. By 2014
20 there was only -- there was like almost just half of
21 that, almost 200,000 linear feet, and then by 2016,
22 this last map that they just tied, it's down to just
23 over, you know, 150. So it's 166,000 linear feet.

24 So clearly it seems that the regular --
25 regulatory zones that we have provided are

1 contributing to seagrass recovery.

2 Public use. The objective is to provide
3 opportunities for resource-base recreational use of
4 Shell Key Preserve where compatible with the
5 conservation and protection of the natural and
6 cultural resources. Activities at the preserve
7 include swimming, sunbathing, picnicking, shelling
8 and birding. Boating and fishing are also popular
9 activities. There are no sanitary or visitor support
10 services, including lifeguards, provided on Shell
11 Key. All visitors are expected to practice a
12 leave-no-trace ethic and remove all trash upon
13 leaving the preserve.

14 All overnight use requires a camping permit that
15 can be obtained online. Permits are free at this
16 time. Each permit holder indicates the number of
17 campers in their party and the dates of arrival and
18 departure from Shell Key. Holders of camping permits
19 are held responsible for all members of the camping
20 party. Campers are required to bring use and remove
21 portable toilets. All camp fires are restricted to
22 the southern public use area of the island, and any
23 open burning of any kind is prohibited from May
24 through September to limit disturbance to nesting sea
25 turtles.

1 With this -- with this chart, this table, here
2 you can see the number of permits received per year
3 and the total number of guests expected since 2009,
4 and from the available data the number of permits and
5 guests have increased steadily over time. We found
6 that March through May are the most popular months.

7 With the current process we're unable to verify
8 that each permit holder and the number of guests
9 actually went camping. On the other hand, we know
10 that some campers do not obtain a permit.

11 Each person who receives a permit must agree to
12 comply with all the rules pertaining to the preserve.
13 The purpose of the permit is to provide the
14 enforcement tool for deputies. We will continue to
15 use this approach to provide camping on the south end
16 of Shell Key.

17 MR. HARPER: Okay. So we've combined public
18 access and public usage in this recreation section so
19 this would be the time to bring up camping.

20 MS. RENFROW: I would say that I would like to
21 see camping fees implemented and I would also maybe
22 consider limiting the number of permits issued until
23 you can raise your level of law enforcement.

24 MR. HARPER: Thank you.

25 MR. COLLETTI: Jack Colletti with shellkey.org.

1 I think I get the idea of the permit, or
2 charging money for the permit. I guess it's -- my
3 guess is that you want to give people a sense of
4 vestment in the process, kind of like, you know, pay
5 for your gym -- gym membership, you're going to do it
6 more often, and I -- you know, I run shellkey.org,
7 and, certainly, by far the most inquires I get is
8 about camping, and I'm certainly open to being
9 convinced that charging for the permits would make a
10 difference. I think it's certainly something worth
11 looking at, but I think the idea that you want to get
12 people vested in the process, kind of an emotional
13 vestment in the process, is the big thing that's
14 going on here, or the thing that's really required,
15 and what -- you know, managing public use of a -- of
16 a resource like this, managing the public's use of it
17 is, well, in a lot of ways like managing a
18 relationship. It takes a lot of time; it takes
19 renewal on a regular basis; it takes creativity and
20 it takes communication, good communication and trust.
21 And -- and one of the things I want to talk about is
22 the communication, in particular the way that we
23 communicate with the signage that's out there.

24 The signs that we have, the rule signs, are --
25 yeah, I've been a sign maker for 30 years, and those

1 signs break every rule of good communication. They
2 are atrocious. They hurt my eyes when I look at
3 them. They don't invite me to come in and be
4 invested in the process. They make me be repelled.
5 If I can just not look at that, then I don't know
6 what the rules are and I -- I'm afraid that that
7 seems to be what happens.

8 You know, in -- really, you know, the design of
9 these is so poor from the fonts to the spacing to the
10 margins, and everything is almost designed to not
11 communicate, and so I would -- I would like to see
12 that addressed. I would like to see something done
13 about that, and to that end, I and my group are
14 prepared to raise money to build new signage in
15 concert with anybody who would like to give input.

16 Tampa Bay Watch, the Audubon Society, we would
17 like to get input on how we can communicate best with
18 the people that visit this island and create some
19 really beautiful signage. Something that, you know,
20 blends into the landscape rather than offends the
21 eye.

22 You know, there was a mention early on by Pam
23 that, you know, we're limited to where we can put
24 these signs, and the implication was it's because
25 they look so horrible, and if we were to build signs

1 that are attractive, are -- they blend into the
2 landscape, you know, it's -- what is the saying, a
3 man in -- a man who cannot hear a shout will often
4 lean to hear a whisper.

5 We want to draw people in, and I think that we
6 could do that with good design, and I think that we
7 could begin to, you know, give people that sense of
8 investment and, you know, if they can, you know, see
9 something in a distance and say what is that, and
10 make them want to go toward that sign, and then maybe
11 be educated about wildlife, about some of the
12 environmental concerns, that -- this is -- this to me
13 seems like the best long-term approach to really
14 managing public use, is to get the public on your
15 side, to give them a sense of investment in the
16 process, and so, like I said, to that end, we are
17 prepared to raise money for -- to build, to install
18 and to maintain over time better signage for the
19 island.

20 MR. HARPER: Thanks, Jack.

21 MS. PAUL: So I want to talk for a second about
22 the camping and the fact that there's a lot of people
23 who are going out there camping and getting the
24 permits, and there may be additional people who are
25 just going and camping, and so they're kind of two

1 things that I really want to talk about, and a third
2 thing that's related to that.

3 Do we have any kind of monitoring of who's
4 camping out there? Do we have a way to kick the
5 people off who didn't get the permit and fine them in
6 some way, and then, is there a carrying capacity for
7 what's reasonable that makes it fun to be out there?

8 I mean, if you're going to be out there and it's
9 a -- you know, a hullabaloo of all these people
10 camping, there's your wildlife experience, it's sort
11 of been lost. So I'm thinking about the quality of
12 the camp experience.

13 So I know, for instance, on Fort DeSoto the
14 campsites are very nicely spaced out so that, for
15 instance, you have -- if you camp at Fort DeSoto, you
16 have a feeling of this is my campsite and, you know,
17 I've got a little tree or something between me and
18 the -- you know, there's -- it's -- there's a
19 wildlife thing, but out here, even in that picture,
20 it just looked like a lot of people together, and I'm
21 just wondering, maybe we would be better off if we
22 limited it to a certain carrying capacity if we had
23 marked sites. I don't know how you would do it
24 because of barrier islands and stuff.

25 MR. HARPER: Right.

1 So we did look into that in 2007, in terms of
2 establishing a carrying capacity or designated sites,
3 and because it's open camping and permitted camping,
4 it's a very different situation than Fort DeSoto, for
5 example. So short of delineating all of those sites,
6 which then also impacts the experience for others,
7 because it's not just campers that are able to walk
8 through that area and bird watch or do other
9 recreational activities, so you really change the
10 character of the camping experience by delineating
11 those sites.

12 I agree with you choose -- some people by design
13 and by intent want to be very close in very large
14 groups. So if it's over 50, we require a large group
15 permit, but other than that -- so there's some
16 self-selection in terms of where people want to go.

17 So I did work with -- I'm going to say this
18 without having the numbers in my hand, but we did
19 work with Jim Wilson to say what is the state or
20 recommended carrying capacity for an open-permitted
21 campground, and if you do the area -- you know, so
22 that's on a per person or a density basis. And so if
23 you do that recommended density or maximum allowed
24 density and then multiply it by that entire southern
25 public use area which is open to camping, it turns

1 into being a huge number.

2 So -- unfortunately, I don't remember the number
3 off the top of my head, but it quickly became -- it
4 became clear we were nowhere close to what a carrying
5 capacity, at least from a published or established
6 place, would be.

7 That's not to say that we couldn't establish a
8 smaller number just based on the patterns to date,
9 but right now we've not proposed a carrying capacity.

10 MS. RENFROW: What about a capacity that
11 fluctuates with your ability to regulate?

12 MR. HARPER: Well, all of our rules, we need to
13 enforce all of them at a time, so I don't want to
14 vary -- that talks about a very confusing message
15 that says -- our position is we establish the rules
16 and we enforce them all the time. So we don't tell
17 people, obviously, when the deputy's going to sweep
18 through and check for your camping permit, but they
19 absolutely can write violations against not having a
20 camping permit in your possession, or having a toilet
21 as well, which is often the case as well, where they
22 may agree and have the permit but not having a
23 camping toilet so . . .

24 MR. CLARK: Well, speaking of that, what are
25 your metrics for how many hours per month/per week

1 that law enforcement is actually on the ground
2 walking on Shell Key, not driving around in the boat?

3 MR. HARPER: Yeah, I don't have those numbers.

4 UNIDENTIFIED WOMAN IN AUDIENCE: I think we have
5 a deputy here, don't we?

6 DEPUTY SHERIFF: I can tell you it's very
7 minimal. The way we are, we have five deputies right
8 now in the marine and land. We do not have the
9 manpower to do it and, unfortunately, we can't
10 dedicate just to Shell Key.

11 MR. CLARK: That's been my observation, and as
12 we all know, laws are as useful as the enforcement,
13 and there's limited factors or finances here. We
14 can't afford the enforcement so we're going to have
15 to step it up in some other facet to make sure the
16 laws are followed, whether it's education, community
17 outreach, bribery, whatever, but that -- that
18 discussion needs to find its way into management
19 form.

20 MR. COLLETTI: And that really is my point
21 exactly, because the nature of enforcement is it
22 can't be there all the time, and also the nature --
23 this is just from a behavioral standpoint, you know,
24 to get -- to build long-term behaviors, to get the
25 public to understand this in the long-term,

1 punishment and a threat of punishment is the worse
2 possible way to build long-term behaviors.

3 On the other hand, getting people to feel like
4 they want to do what it is that you want them to do
5 and, you know, every -- the vast majority of the
6 people that go out there want to do right by this
7 island. They might not all know exactly what they
8 might need to do, but we can coax them with
9 suggestions, we can do -- you know, yes, there are
10 going to be people who go out there and do the wrong
11 thing. That's going to be the case no matter what,
12 especially with sparsely enforced rules, but -- so it
13 is definitely always going to take volunteers to go
14 out there to clean up, and it's going to take that
15 effort, and we have to embrace that effort.

16 As volunteers ourselves, we have to go, yeah,
17 that's what we have to do, because there's always
18 going to be a few people, but we can't certainly
19 indict everybody that goes out there. We can't
20 suggest that, you know, the vast majority of people
21 out there are doing the wrong thing. Really, it's a
22 small minority, and then it's up to us to make up for
23 that small minority because that's the nature.

24 UNIDENTIFIED MALE IN THE AUDIENCE: I'll give
25 you a clap for that one. Education is the key.

1 MR. HARPER: All right. Other questions?

2 MR. CLARK: Was there anyone from West Shore
3 Drive invited to participate on this group?

4 MR. HARPER: I think we went --

5 MR. CLARK: Homeowners.

6 MS. RENFROW: It was a blanket invitation to the
7 community.

8 MR. CLARK: I know you're representing the
9 Tierra Verde Community Association --

10 MS. RENFROW: Right, there was not an
11 individual invitation.

12 MR. CLARK: -- but they're certainly one of your
13 stakeholders. It's not in a big way, and they've
14 been very, very active with the issue for a number of
15 years, and I think that's kind of one of the
16 oversights of trying to bring everybody to the table
17 but leaving out a select group that has a very
18 important part of the discussion, as well as Collany
19 Key. I mean, they're developing it -- they're going
20 to be one of your largest residential facilities on
21 Shell Key Preserve. In terms of education, Ocean
22 View Drive and Collany Key, there's a lot of people
23 there that need to add to the discussion as well.

24 So I'm a little concerned about that oversight,
25 but before we go, Pam, if I could ask you to put up

1 that regulatory zone graphic, and if I could borrow
2 your laser projector real quick.

3 There's the flood sand delta on the inside of
4 the old pass, and over the years --

5 MR. HARPER: There's no --

6 MR. CLARK: I -- there we go.

7 MR. HARPER: Yeah, that's --

8 MR. CLARK: Heads up, Steve.

9 MR. HARPER: Yeah, it's a little spotty.

10 MR. CLARK: All right. So here's the sand delta
11 that comes in.

12 There's a natural slosch channel that's formed
13 between the old south channel and the channel over
14 here behind Billy's, right through there. Right now
15 that's part of the idle -- that's part of the non --
16 noncombustible engine zone, but really that's the
17 only way for anyone to access between this back water
18 area because there's so much sand in the system, and
19 I would like the county to consider at least sliding
20 it back a little bit so people can legally use that
21 natural slosch channel that's formed to get between
22 the east and the west side of the preserve.

23 MR. MARKHAM: That channel's been there more
24 than 30 years.

25 MR. CLARK: Without doing it illegally. I think

1 it formed right down the middle of that, that
2 sandbar.

3 MR. MARKHAM: Yep, it was there in the '80s.
4 You could run through there all the way around and
5 around the point into Bunces Pass.

6 MR. CLARK: That's the only little -- and I said
7 little -- deep water there that allows you to get
8 through between God's Island and the old northern
9 pass area.

10 MR. HARPER: Thank you.

11 Other comments on public use?

12 MS. BURKE: So just based on the information
13 that's been presented in the plan and what I know
14 about the area out there, I'm not convinced that you
15 don't have public access conflicts, user conflicts,
16 with some of the resource management goals of the
17 island, specifically with regard to nesting birds,
18 and I think some of those questions have been
19 answered, but if in fact there is a user conflict
20 here, again, I'm guided by Comprehensive Conservation
21 and Management Plan for Tampa Bay, it specifically
22 addresses user conflicts for these kinds of public
23 recreation areas, and if we're really concerned about
24 managing this preserve for nesting shorebirds, I
25 think there should be some consideration to whether

1 or not camping is appropriate at all within the
2 summer months, like June to September time frame.

3 MR. HARPER: Thank you.

4 MS. PAUL: Steve? Steve?

5 I was gonna say one more thing.

6 MR. HARPER: Yes, sorry.

7 MS. PAUL: So I was just going to add to the
8 point about education.

9 About 15 years ago Audubon created a boaters
10 guide for Boca Ciega Bay and we're out, so I would
11 like to say why don't we print some more of that,
12 those. Update it, you know, read through and -- and
13 I think we printed 100 -- no, we printed about 10,000
14 copies of that. So I'm just offering to help with
15 re -- review and update of the Boca Ciega Bay
16 Boater's Guide.

17 MR. HARPER: And we will get to the education
18 section in just a second.

19 Other questions then?

20 DEPUTY SHERIFF: Just real quick, I know there's
21 mention about the signs. Those orange and white
22 signs, those are regulatory signs by the Coast Guard,
23 so that's why all the mariners know those signs. The
24 idle speed, no internal combustion. As far as the no
25 trespassing and the Shell Key Preserve, those signs

1 you can do what you want with them, but the internal
2 combustion and the idle speed have to stay the same.
3 So just a heads up on that.

4 MR. COLLETTI: Yeah, my esthetic concern really
5 is not those kind of regulatory signs, but more the
6 informational signs and the larger signs on the
7 island that just show the rules.

8 DEPUTY SHERIFF: I know we do have a big problem
9 with the yellow no trespassing/beach closed. People
10 feel it's behind those signs, but when their feet are
11 in the water, they're good, but when they hit the
12 sand is when they come into issues, which is what Pam
13 said earlier.

14 MR. HARPER: Yeah, we've been --

15 UNIDENTIFIED WOMAN IN AUDIENCE: It's not clear,
16 the sign is not clear.

17 MR. HARPER: -- trying to address that for a
18 long time.

19 DEPUTY SHERIFF: Yeah, people think that it's
20 behind those signs and it's not.

21 MS. LEISURE: Yeah, we're almost out of those
22 and the reprint will say your feet have to be in the
23 water, something to that effect so that it's clear.
24 We've been -- this has been really --

25 DEPUTY SHERIFF: Right. I know you've been

1 working with Chris a lot.

2 MS. LEISURE: Yeah, that's been a hard area to
3 post.

4 MR. HARPER: It's, again, very dynamic as well
5 so . . .

6 UNIDENTIFIED MALE IN THE AUDIENCE: Those are
7 temporary. I went out there after the hurricane and
8 I picked up five or six of those signs and put them
9 back up.

10 MS. RENFROW: Yeah, I noticed a lot of signs
11 down yesterday.

12 MR. HARPER: Yep. Yep, throughout.

13 MR. FAULKENSTEIN: It may be also helpful to
14 include in the management plan the people from the
15 Audubon and Sea Turtle Trackers will be going into
16 some of these areas to do what we have to do for the
17 protection of wildlife so they don't get a ticket.

18 MR. HARPER: Right. Yeah, I think we're pretty
19 well versed with the deputies on that and they're
20 pretty in tune with the folks that are legally
21 allowed.

22 For the research studies that we do, different
23 than the ongoing volunteer efforts that we're
24 partnering with, some of the temporary use through
25 the researchers and they come from out of state --

1 for example, we issue them an authorization letter
2 and then we let both the rangers at Fort DeSoto as
3 well as the deputies know that they're authorized to
4 do certain uses in nonpublic areas.

5 All right. Let's move on to the education.

6 MS. LEISURE: Okay. The next section of the
7 plan covers outreach and education. Outreach and
8 education activities promote awareness and
9 understanding of the importance protecting the
10 preserve and the objective is to provide outreach and
11 education programs describing the ecology of coastal
12 ecosystems and the benefits of preserving and
13 enhancing these natural resources.

14 The University of Florida Institute of Food and
15 Agricultural Sciences, IFAS, Florida Sea Grant Agent
16 provides education to the preserve through the Salty
17 Topics Program posted at PCR managed Weedon Island
18 Preserve Cultural and Natural History Center.

19 The program brings marine research scientists to
20 a public forum. Tampa Bay's home to many
21 universities, government and nongovernment agencies
22 at the forefront of marine research. Ninety percent
23 of participants reported significant knowledge gained
24 as a result of participation at Salty Topic seminars.

25 The environmental enhancement and restoration

1 programs offered by the Sea Grant Agent provide
2 community members, high school interns and visiting
3 college student groups with hands-on service learning
4 opportunities that increase knowledge. Programs
5 build hands-on skills such as plants and animal
6 identification and use of field equipment. Students
7 and volunteers contributed to exotic vegetation
8 removal and trash cleanups on Shell Key.

9 MR. HARPER: All right.

10 Comments/questions/concerns about the education
11 and outreach section?

12 MS. RENFROW: Sorry, I keep raising my hand.

13 I would like to see a proactive effort by
14 someone in the county to reach out to the residents
15 of Sunset Key to make sure that they include in their
16 information to all new residents that are moving in
17 what the rules and regulations are and maybe some
18 educational background on Shell Key.

19 MR. HARPER: Sure.

20 Well, I think Pam did mention was -- we do -- we
21 do promote and provide an educational brochure with
22 the rules and regulations, and the Shell Key Shuttle
23 and some of the other operators distribute those in
24 order to convey the rules.

25 MS. RENFROW: But I'm talking about specifically

1 for Sunset Point, which is the development on Collany
2 Key --

3 MR. HARPER: Correct.

4 MS. RENFROW: -- and those are the residents I'm
5 seeing take their dogs out there and --

6 MR. HARPER: Right.

7 MS. LEISURE: That's something that --

8 MS. RENFROW: Yeah.

9 MR. HARPER: Okay.

10 UNIDENTIFIED MALE IN THE AUDIENCE: Why don't we
11 make a jump, instead of using paper, and move to
12 the --

13 MR. HARPER: It's available.

14 UNIDENTIFIED MALE IN THE AUDIENCE: How about
15 some apps on telephones? Everybody's got a
16 telephone. Why don't you put some rules on there and
17 ask to go to the app --

18 MR. HARPER: We'll get -- hold on your questions
19 for just a minute here.

20 UNIDENTIFIED MALE IN THE AUDIENCE: Okay, I'm
21 sorry.

22 MR. CLARK: I just would like the management
23 plan to reflect that Tampa Bay Watch is -- we
24 organize 300 field trips a year with area schools to
25 participate in this environmental education

1 initiative that you're describing here, but we also
2 do a lot of cleanup events throughout the Shell Key
3 Preserve. We help support Audubon with the monotube
4 cleanup event. We do daily crab trap cleanups, as
5 well as the beach cleanups, and we also do eco
6 education through kayak trips, not only for kids, but
7 adults as well, and I'm not sure that we skipped over
8 the public use, but there's a couple of kayak
9 charters that take groups of people out now that
10 really -- that they didn't do a year or two ago, and
11 you might want to reflect the management plan to
12 include them as well.

13 MR. HARPER: Thank you.

14 Other questions on -- or concerns on education?

15 MR. SAVERCOOL: While the preserve is IDA, many
16 citizens do not relate to this as something they're
17 concerned with. There are several user groups, such
18 as recreational and commercial, fisherman, boaters,
19 sunbathers, water enthusiasts, et cetera, that are
20 attracted to the natural experience. Each group
21 should be targeted to educate/advertise how their
22 actions could hinder or benefit the areas they seek
23 to experience.

24 MR. HARPER: Thank you.

25 All right. Pam.

1 MS. LEISURE: Okay. Finally, I'd like to
2 thank -- to thank all of our volunteers and our
3 partners. This concludes the overview of the plan
4 and we'd like to -- we just want to thank you all
5 because, obviously, we can't do this without our
6 partners for monitoring and research.

7 MR. HARPER: Thank you.

8 I'd like to thank the public for being so
9 patient. We'll now move into the public comment
10 period of the presentation, so we'll gather -- Pam --
11 please hand in your cards to Pam if you filled out a
12 comment card.

13 Again, if you would like to register a comment
14 but are not so keen of standing up and talking, go
15 ahead and fill it out and just check that you don't
16 want to speak and that way your comment will get
17 recorded, and then I'll start -- I'll start calling
18 out names. I'll call out the person who's speaking
19 and then I'll call out the person that's sort of on
20 deck, as it were, so they can come on up and be
21 waiting and be ready to go so we don't have to wait
22 for the transitions.

23 And we're going to set it up with a three-minute
24 timer here, similar to what the board of county
25 commissioners does at their public meetings. So it

1 doesn't give you an indication that it's coming up,
2 but once the thing beeps, go ahead and try to wrap up
3 your thoughts and move on so the next person can
4 talk.

5 So, Lorraine.

6 MS. LEISURE: Lorraine and Nancy.

7 MISS LORRAINE: What name did you say?

8 MR. HARPER: Lorraine. Lorraine, you're first,
9 and then Nancy Ogden and John Ogden.

10 MS. LEISURE: Okay. Neither of them want to
11 speak. I didn't read it.

12 MISS LORRAINE: Where do we go?

13 MR. HARPER: Can you just check the box?

14 Who's after Lorraine?

15 Do you need to do the slide?

16 No, just hold onto both, and this is the thing.

17 MISS LORRAINE: Oh, that's it.

18 Okay. I'm starting. I just want to say that
19 personally speaking I do not believe that the
20 preserve is being basically managed at all. I'd like
21 to know how many times a year someone from the staff
22 walks the entire island.

23 I know the answer, but it's not -- maybe once,
24 if we're lucky.

25 We know about the marine patrol. In 2007 I was

1 very involved in the big change process and we were
2 very against the camping on Shell Key, but the county
3 made a promise that they -- they would monitor and
4 regulate it if we conceded on that point, which we
5 did.

6 After 2010 that promise went away. When the
7 Lealman patrol got like totally decimated, there were
8 two officers for everything: Brooker Creek, Weedon
9 Island, Shell Key, on and on. It's essentially a
10 joke, and I love those guys, so no cut on you, my
11 friend, but it's a cut on the county not honoring the
12 promise they made to us in 2007, that if we agreed to
13 allow camping, that the county would monitor it.

14 There's not even any night patrol on the waters
15 anymore. Is that not true, deputy?

16 DEPUTY SHERIFF: That's correct.

17 MISS LORRAINE: There's no one out at night.

18 Ask the Fort DeSoto rangers, every year Fourth
19 of July fireworks are going off all over Shell Key
20 Preserve.

21 Is that good for the nesting birds? I don't
22 think so.

23 So you have -- I would advocate, I would agree
24 with you, camping should be closed down for March
25 through September in the management plan. If you

1 don't do that, you are continuing the lie that we are
2 living right now that the county would protect the
3 preserve first and foremost for turtle and seabird
4 nesting.

5 That is not the case now, it's the wild wild
6 west, and I think the county has a little bit more
7 money than 2010 now, and it's time that the marine
8 patrol got beefed up, and you should still restrict
9 camping through the nesting season from March through
10 September because you cannot regulate it. No one is
11 ever checking on camping permits.

12 Another big point, coyote eradication, if that
13 doesn't happen in Fort Desoto and Shell Key, you can
14 kiss seabird nesting goodbye anyway. The coyote
15 that -- and there was someone who -- and I don't know
16 whether they did it on their own, but we had a
17 tracker because I busted it for a month to get that
18 to happen in Fort DeSoto. All of our nesting got
19 destroyed: Black skimmer, American Oyster Catcher,
20 least tern, one coyote.

21 When we drove out on the park for a couple of
22 days, they were having a pretty good time over at
23 Shell Key. We drove it out, the next two days later,
24 I heard it from Tracy, the coyotes were digging the
25 turtles up in Shell Key. They're moving from Shell

1 Key to Fort DeSoto, and there's a pack of at least
2 seven. I know many people who have seen them.

3 So unless that problem is resolved to some
4 degree, devastation is going to be off the charts
5 ongoing. The population is growing and no one's
6 doing anything about it.

7 Of course, the people in Tierra Verde would be
8 happy too. We need to do something about it.

9 Thanks. Goodbye.

10 MR. HARPER: Thanks, Lorraine.

11 Next up is Tracy.

12 MISS TRACY: Okay. So I was a high school math
13 teacher so speaking for three minutes is not going to
14 be easy, I apologize here.

15 So I am with the Sea Turtle Trackers and we are
16 on the beach at Saint -- on Shell Key for over 200
17 days straight, from April 1st to October 31st. We
18 are the eyes out there and we see what is happening
19 on a daily basis. If you want to know not the
20 scientific side of things, but the effect of humans
21 and predators out there, we know, because we're
22 there, I promise you, and we see it regularly.

23 Our job, as we've said before, we are ed -- or
24 as you probably know, we mark nests, we deal with the
25 predators by installing cages on our nests, because

1 we do have coyotes and raccoon problems, and we do
2 the nesting surveys, the hatching surveys, and we
3 collect trash, and we collect trash, and we collect
4 trash constantly.

5 As you know, camping is probably our biggest
6 concern out there. I -- we are not taking a stance
7 whether we agree with it, but it is a definite
8 problem. Holiday weekends are the highest times of
9 campers and they are primarily on the south side and
10 around to the southwest side. Those holiday weekends
11 also coincide with our most busy time of year, when
12 we have the most active sea turtles nesting and the
13 most active babies hatching, and that is a major
14 concern for us for many reasons.

15 We do try to speak with the campers, and going
16 back on what you were talking about, education is the
17 key. We are not the patrol out there, we are not the
18 law, so we take a stance of trying to visit with each
19 camper.

20 I will tell you the numbers that you showed that
21 as permits, not that I distrust your numbers that
22 there were 1100 permits issued, I did not come across
23 1100 campers with permits. Most of them that I
24 talked to do not have permits and they are not aware
25 of the laws. Again, ignorance of the law is no

1 excuse. They do not have permits most of the time.
2 It's very apparent by the questions that I ask them;
3 therefore, they're not aware of the seasonal rules
4 either regarding fires and so on and so on.

5 Here's a perfect example of why it is a problem
6 to have campers out there. This was very early in
7 the season. In fact, this is our very first sea
8 turtle nest of the season, if it was any indicator
9 what we have to come.

10 There's a camper and three foot in front of it
11 is a nest that happened over night. And she did not
12 come up and hit the nest -- or hit the campground or
13 hit the tent, but literally one more major step in
14 that direction and she would have been in their tent.

15 They happened to be a very good group of
16 campers. They knew about it; they saw her; they
17 stayed in their tent, please no, and they did not
18 mess with her, but it does happen.

19 Campfires, as you can see from there, it doesn't
20 matter that there's signs everywhere. Actually,
21 there's not enough signs. There's a campfire;
22 there's a sea turtle nest. It doesn't matter whether
23 it's a rule or not.

24 Campfires last year from a camper -- that one
25 started out there. He was not on the beach. They

1 were clear back in the brush with their campfire.
2 You see that that doesn't help it -- the situation
3 out there any.

4 You can't believe the kind of things that we
5 pick up out there. The worst I've picked up is
6 buckets of fecal waste, and, yes, I've carried it
7 three miles home because it's -- you can't leave it.

8 This is a normal day, Sea Turtle Trackers
9 picking up trash. That is not an unusual day for us.

10 Artificial lighting, we've already discussed
11 that it can't happen with the sea turtles at any time
12 of year, whether they're nesting or hatching, because
13 it disorients them.

14 Predator, coyotes, that's what he does to our
15 nests. Yes, it's a concern, but we also realize this
16 is a natural part of any -- anyplace where we have
17 invaded their space and it's going to happen. It
18 also happens after we put cages on.

19 So you see the hole on the right? That's on the
20 outside of the nest. The hole on the left is where
21 the babies came out. So he goes in through the side
22 of the cages occasionally also.

23 Things that we would like to see happen: If the
24 camping is continuing out there, an explanation of
25 violations to the federally protected animals out

1 there, the sea turtles and the birds; explanation of
2 appropriate lighting, because people don't know;
3 explanation of negative impact of trash; and I come
4 across a lot of Spanish-speaking campers that do not
5 know the rules and they -- I have trouble speaking
6 with them. The rules/the permits need to be in
7 Spanish so that if they're doing everything by law,
8 they can get it online.

9 Okay. Sorry for the overtime.

10 MR. HARPER: Thank you. Thank you.

11 So that's all of the -- that was all of the
12 cards that we have. We have a number of cards that
13 people checked that they do not wish to speak, so I
14 want to make sure that if anyone would like to speak,
15 go ahead and fill out a card or go ahead and speak
16 and then fill out a card.

17 Again, we appreciate your patience sitting
18 through the whole presentation. If not, then we'll
19 go ahead and close -- sorry, Commissioner.

20 COMMISSIONER JUSTICE: Thank you very much, and
21 I've been kind of holding my tongue because I wanted
22 to take in, and I've learned more about Shell Key in
23 the last 24 months than I ever want to know about
24 Shell Key in my entire life, but I do want to echo
25 what you heard.

1 I want to thank you, the members on this
2 committee, for your time and your interest, and those
3 in the public, but I also want to make sure that --
4 you know, this management plan is not the
5 end-all/be-all of your government's activities and
6 role in protecting and preserving, and to make sure
7 that you know that your county commission is
8 available, not just as a management plan, but all
9 year long to take your input of those issues that
10 arise, we want to hear about it, and not just in a
11 10-year review, but any time you feel there's a need.

12 I appreciate your involvement.

13 MR. HARPER: Thank you, Commissioner.

14 All right. With that, we'll go ahead and close
15 the public meeting. I would like to thank the
16 members of the Shell Key Advisory Group for taking
17 the time to review the plan and come tonight to
18 provide your comments. I know a number of you came
19 to the other meeting as well. We certainly
20 appreciate that and the time and effort that takes
21 place. So if you have any other comments, or maybe
22 you made notes on your plan or grammatical or
23 typographical suggestions and you just want to turn
24 that into us now, that would be fine. We'll go ahead
25 and incorporate those changes as well.

1 MR. CLARK: Is there a time for -- that you'll
2 be taking public comment if people submit written
3 comments to you in the next week or two?

4 MR. HARPER: Yeah, it's available -- the plan is
5 available on the website. So we have received some
6 direct comments and, again, we'll have the public
7 meeting at the board of county commissioner meeting.

8 MISS LORRAINE: When is that?

9 MR. HARPER: It hasn't been scheduled yet so
10 it's either --

11 MISS LORRAINE: Is Pam taking emails so we get
12 notification when it's established, the board of
13 county commissioner meeting?

14 MR. HARPER: Yeah, they publish the agenda --

15 MR. SACCO: It's usually on the Thursday before.

16 MR. HARPER: The Thursday before, but, yeah,
17 we'll let you know.

18 MISS LORRAINE: Okay, so you'll email all of us?
19 We have your word that we'll know?

20 MR. HARPER: All of us being anybody that wants
21 to come up and give me their email.

22 COMMISSIONER JUSTICE: It'll be on the 17th or
23 the 31st.

24 MR. HARPER: Correct.

25 MS. LEVY: It should be on the sign-in sheet.

1 MR. HARPER: Yeah, we have the sign-in sheet,
2 Lorraine. I'm not sure if everybody wants the email,
3 but if you're interested, please come to me and I'll
4 do that.

5 As the Commissioner said, I don't think we can
6 make the deadlines for the next day so it should be
7 the 31st.

8 MS. RENFROW: Thank you for your time.

9 MR. HARPER: Yes, thank you.

10 Everybody travel safely and have a good evening.
11 Thank you.

12 (Proceedings concluded at 8:35 p.m.)

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CERTIFICATE OF REPORTER

STATE OF FLORIDA)

COUNTY OF PINELLAS)

I, RUTH A. CARNEY, Registered Professional Reporter,
do hereby certify that I was authorized to and did
stenographically report the SHELL KEY PRESERVE MANAGEMENT
PLAN REVIEW on September 25, 2017; that a review of the
transcript was not requested; and that the foregoing
transcript, pages 1 through 117, is a true record of my
stenographic notes.

I FURTHER CERTIFY that I am not a relative, employee,
attorney, or counsel of any of the parties, nor am I a
relative or employee of any of the parties' attorney or
counsel connected with the action, nor am I financially
interested in the action.

DATED this 10th day of October, 2017.



Ruth A. Carney
Registered Professional Reporter