

Formal Public Hearing of United States Fish and Wildlife Service
STATUS OF THE WEST INDIAN MANATEE, PROPOSED ACTION TO RECLASSIFY THE

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

FORMAL PUBLIC HEARING

OF

UNITED STATES FISH AND WILDLIFE SERVICE

SUBJECT: Proposed Action to Reclassify the
Status of the West Indian Manatee

DATE TAKEN: Saturday, February 20, 2016

TIME: 3:04 p.m. to 5:19 p.m.

PLACE: Buena Vista Palace Hotel
Conference Center
1900 Buena Vista Drive
Orlando, Florida 32830

REPORTED BY: LISA K. WORKMAN, FPR
Court Reporter and Notary
Public, State of Florida

1 A P P E A R A N C E S:

2 LARRY WILLIAMS
3 Florida State Supervisor for Ecological Services
4 U.S. Fish and Wildlife Service

4 JAY HERRINGTON
5 Field Supervisor of the North Florida Ecological
6 Services Office
7 U.S. Fish and Wildlife Service

6 JIM VALADE
7 Florida Manatee Recovery Coordinator
8 U.S. Fish and Wildlife Service

8 CHARLES UNDERWOOD
9 Public Information Officer
10 U.S. Fish and Wildlife Service

10 DELORES YOUNG
11 Public Hearing Officer

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 P R O C E E D I N G S

2 *****

3 MS. YOUNG: Good afternoon. It is
4 approximately 3:04 p.m., Saturday, February 20th,
5 2016. Welcome to the Fish and Wildlife Service's
6 public hearing on its proposed action to
7 reclassify the status of the West Indian manatee
8 from endangered to threatened.

9 This public hearing will now come to order.
10 At this time I ask that if you have cell phones
11 or other devices, that you silence them now.

12 My name is Delores Young. I was hired by
13 the Fish and Wildlife Service to moderate this
14 public hearing. I am an unbiased party,
15 independent and impartial. My obligation to you
16 is four-fold, and to the Fish and Wildlife
17 Service; that is, to maintain order, to ensure a
18 friendly and non-adversarial environment, to make
19 sure that speakers stay within the allotted time
20 frame, and to ensure that each and every person
21 that's here today that wishes to speak gets to do
22 so, hopefully, equally and fairly.

23 I will now introduce our panel. To my
24 right -- to my left -- I'm sorry -- is Larry
25 Williams. Larry is the Fish and Wildlife

1 Service's Ecological Services State Supervisor
2 located in the Vero Beach, Florida office.

3 Jay Herrington. Jay Herrington is the Fish
4 and Wildlife Service Field Supervisor for the
5 Jacksonville office. The Jacksonville office has
6 the lead for manatee recovery.

7 To my right is Jim Valade. Jim is a senior
8 biologist and the Regional Manatee Recovery
9 Coordinator located in the Jacksonville, Florida
10 office.

11 To ensure that this public hearing is
12 properly recorded, the Fish and Wildlife Service
13 has hired a court reporter, and it's Ms. Lisa
14 Workman. She will record the public hearing and
15 ultimately create a written transcript. You may
16 have a copy of that written transcript at a cost
17 to you. If you would like to have that copy,
18 then you should call Lisa's office, which is
19 Orange Legal. The number is 1-800-275-7991.

20 An electric copy of the written transcript
21 will also be posted at the portal that was
22 identified in the Federal Registry notice
23 announcing this action. If you need that
24 address, you can refer to the Federal Registry
25 notice or you can get a copy of that address from

1 the speaker registration tables out front or as
2 it appears on the screen.

3 The order of this hearing will be held in
4 three parts. First, I will give a brief
5 discussion setting out the ground rules; there
6 will be a short presentation by Jim Valade of the
7 proposed reclassification; and then we will
8 launch into the public comment period.

9 I will now start with the ground rules. The
10 ground rules for this public hearing are very
11 important. These rules have been established to
12 maintain order, to ensure that each speaker gets
13 a fair and equal opportunity to speak, to be
14 heard, and to get their comments recorded.

15 First I would like to talk about what this
16 hearing is and what it is not. This hearing is
17 an opportunity for you to be heard, for your
18 comments, thoughts, and recommendations to get on
19 the record. This is not a court proceeding.
20 Although it's a formal hearing with a court
21 reporter, there be will be no direct or cross
22 examinations and no rebuttals. This is not a
23 court proceeding.

24 This is not a debate. So I ask that you not
25 debate with the members of the Fish and Wildlife

1 Service or between and among any members of this
2 audience.

3 This is not a question and answer session.
4 We have already had a question and answer session
5 earlier today. If you have questions, they will
6 not be answered here, but you may include your
7 question in your public comment, and that will be
8 included in the transcript and it will be
9 reported as a concern, and the Fish and Wildlife
10 Service will give it due consideration when it
11 makes its final decision on this matter.

12 Finally, this hearing is not an opportunity
13 to ridicule or vilify any members of this
14 audience or any members of the Fish and Wildlife
15 Service staff. The key words today are civility,
16 courtesy, and respect, and I ask that you accord
17 the same civility, courtesy, and respect that you
18 would wish accorded to you.

19 As a result, I ask that there be no loud
20 noises, no booing or hissing or harassing
21 remarks. Please refrain from any disruptive
22 actions that would prevent any member of this
23 audience from being heard and getting their
24 comments recorded on the record.

25 We understand that there are emotional

1 aspects to this hearing, but please keep in mind
2 that not all speakers are experienced. Some are
3 timid, some are nervous and would not otherwise
4 come forward in an adversarial atmosphere, so
5 please accord all members of this audience
6 civility, courtesy, and respect.

7 As to your comments, if you would like to
8 speak, you have to be registered to speak. So if
9 you have not registered and you wish to speak,
10 please register out in the hall at the speaker
11 registration table. If you have not registered,
12 you will not be allowed to speak. A staff member
13 at the speaker registration table will be happy
14 to assist you.

15 Also, keep in mind that if you have
16 registered to speak and you later change your
17 mind and do not wish to speak, you don't have to
18 speak, particularly if you find that a previous
19 speaker has adequately covered your comments and
20 there is no need to repeat those comments.

21 Time limits have been set for this public
22 hearing of 2 minutes and 15 seconds. We have a
23 large turnout today, so I ask that you adhere to
24 those time limits. We have an automatic timer
25 here that will display the colors green, yellow,

1 and red here and at the podium. The green light
2 will display during your public comment; the
3 yellow light will display within 45 seconds of
4 the end of your comments; and then when the red
5 light displays, your time is up and it's time for
6 you to leave the podium.

7 Please adhere to those time frames. If you
8 continue to speak beyond your speaking time, you
9 will be taking away time from other speakers.
10 Now, if you're in the middle of a sentence and
11 you wish to complete that sentence, you will be
12 allowed to do so. I ask, however, that you not
13 continue on in dialogue.

14 I will be calling two people at a time. The
15 first person called will proceed directly to the
16 podium here in front of me. The second person
17 called will be a backup speaker and will sit
18 right down front behind the podium as a backup
19 speaker; and once the first speaker leaves the
20 podium, the backup speaker can approach the
21 podium and begin comments.

22 When you approach the podium, please speak
23 clearly into the microphone. Please state your
24 name and spell your name so that the court
25 reporter can correctly identify you. You may

1 supplement your oral comments tonight with
2 written comments. So if you have a written
3 comment and you would like to give them to a
4 staff member of the Fish and Wildlife Service
5 tonight, please do so before you leave. And you
6 also have until April 7th, 2016, to submit
7 written comments via the portal or mail in to the
8 Fish and Wildlife Service, and you can get those
9 addresses, again, as they appear on the screen,
10 or from a staff member at the speaker
11 registration table.

12 All public comments and information, oral
13 and written, that are received by the Fish and
14 Wildlife Service will be given due consideration
15 by the Fish and Wildlife Service in their final
16 decision-making process.

17 Having stated the ground rules and the
18 importance of these ground rules, we would now
19 get ready for our presentation by Jim Valade.

20 MR. VALADE: Yes. As Delores said, we are
21 over here today to take comments on the Service's
22 proposal to reclassify the West Indian manatee
23 from its current status of endangered on the
24 endangered species list to that of threatened.

25 Manatees, the West Indian manatee in

1 particular, is on the endangered species index
2 list of threatened and endangered species. This
3 is an excerpt from the -- from the list. As you
4 can see, the West Indian manatee is the listed
5 entity. There are two subspecies of the West
6 Indian manatee: The Florida subspecies and the
7 Antillean subspecies.

8 The historic range is the southeastern
9 United States, the Caribbean Sea, and South
10 America, and the population is identified as
11 endangered throughout its range.

12 The Florida Manatee was first listed in
13 1967, and that listing was modified in 1970 to
14 include the West Indian manatee throughout its
15 range. A critical habitat for the species was
16 identified for the Florida subspecies only here
17 within the state of Florida, and there are many
18 special rules that have been adopted for the West
19 Indian manatee specifically here in Florida. We
20 have many Manatee protection areas throughout the
21 coastal areas here in Florida where manatees can
22 be found.

23 This map here, this shows the range of the
24 West Indian manatee. As you can see, manatees --
25 manatees range from Chesapeake Bay, up in the

1 Maryland/Virginia area, down to Brazil at the
2 mouth of the Amazon River. They're found in
3 areas well in between. They're found in Mexico,
4 Central America, and the Lesser and Greater
5 Antilles, including Puerto Rico.

6 The Florida subspecies can be found in the
7 southeastern United States and in the Bahamas,
8 and the Antillean manatee is found elsewhere,
9 certainly, once again, in the Greater and Lesser
10 Antilles and Central and South America.

11 It's important to know, before we get too
12 far down the path here, just what an endangered
13 species is. These are the definitions from the
14 Endangered Species Act, and "An endangered
15 species is a species which is in danger of
16 extinction throughout all or a significant
17 portion of its range."

18 We recently added the legal interpretation
19 of what is meant to be in danger of extinction,
20 and a species that is in danger extinction is one
21 that is currently on the brink of extinction in
22 the wild. A threatened species is a species
23 which is likely to become an endangered species
24 within the foreseeable future throughout all or a
25 significant portion of its range. A threatened

1 species is not on the brink of extinction but
2 threats remain and must be addressed for a full
3 recovery.

4 In our evaluation of the status of the West
5 Indian manatee, the Endangered Species Act
6 requires us to do a threats evaluation. In the
7 Service, this is known as the five-factor
8 analysis, and we consider five factors. We
9 consider the present or threatened restriction,
10 modification, or curtailment of the species'
11 habitat or range. We consider overutilization
12 for commercial, recreational, scientific, or
13 educational purposes. We consider disease or
14 predation. We consider the inadequacy of
15 existing regulatory mechanisms, and we consider
16 other natural or manmade factors affecting its
17 continued existence.

18 In our review of threats facing the West
19 Indian manatee, it became apparent that the most
20 common significant threat throughout the range of
21 the West Indian manatee is that of habitat
22 fragmentation and loss. Outside the U.S --
23 significantly, fishing gear entanglements are a
24 significant threat to manatees outside of the
25 U.S.

1 Here in the United States significant
2 threats that continue to face the manatee are the
3 loss of warm water habitat, the pending loss of
4 the warm water discharges at power plants, and
5 also watercraft collisions.

6 Manatee conservation activities have been
7 ongoing for decades. Some of the first measures
8 were put in place back in the late 1960s and they
9 have continued since that time. Here in Florida
10 we have a network of manatee protection zones.
11 We have areas where boat speeds are restricted,
12 and certainly some waterway access points are
13 restricted to boats as well. This is our primary
14 strategy for reducing the threat of watercraft
15 collision to manatees. Boats that slow down, you
16 know, tend to give manatees the time to get out
17 of the way. Should manatees be struck by
18 slow-moving boats, the injuries are not always
19 life-threatening, and certainly a boat operator
20 that operates at a slow speed can better see
21 manatees while operating a boat.

22 We have also engaged in the -- the -- I'm
23 sorry. We have also implemented manatee
24 protection devices on -- on water control
25 structures such as navigation locks and water

1 control structures. Historically, these
2 structures have crushed manatees, and nowadays we
3 have devices on these structures that, you know,
4 once they sense a manatee, they remain open and
5 allow the animals to pass through. They've been
6 remarkably successful.

7 We have also been working with our
8 conservation partners, the State of Florida and
9 others, to restore springs -- the picture here is
10 of a spring down in Homosassa -- but there have
11 been many such instances where we've been
12 restoring important manatee habitat.

13 We do have a problem here in Florida in
14 regards to fishing gear entanglements primarily
15 of manatees becoming entangled in crab traps.
16 The way that we address this here in the United
17 States is through our Manatee Rescue Program, the
18 MRP, which has proven to be a successful means
19 for disentanglement and returning these animals
20 to the wild. Not only do we do things like this
21 here in the United States, but there are many
22 conservation activities ongoing elsewhere.

23 In our evaluation of the status of the West
24 Indian manatee, not only do we need to consider
25 the threats and how they're being addressed, we

1 also have to look at population information,
2 population demographics, and certainly a
3 significant data point is the number of manatees,
4 you know, that are found throughout the species
5 range.

6 We have identified approximately 13,000
7 manatees that can be found within the range of
8 the West Indian manatee, and this number includes
9 about 6,350 manatees in the southeastern United
10 States and 532 manatees in Puerto Rico.

11 There have been two significant model runs
12 that project and forecast what will be happening
13 to the West Indian manatee. These models, you
14 know, project positive growth for manatees
15 outside the United States, and here in Florida
16 the model projects less than a 2 1/2 percent
17 possibility that the population will go down for
18 these individuals over the next 100 years.

19 Now, based on our analysis of these threats
20 based on the most current population information,
21 we believe that the West Indian manatee no longer
22 fits the definition of an endangered species; that
23 is, we do not believe that the West Indian
24 manatee is on the brink of extinction, and as
25 such, we're proposing to change the species

1 status to that of threatened.

2 There have been many questions since our
3 announcement in January that we're proposing a
4 reclassification. People want to know what will
5 change if the status changes. Simply put,
6 regardless of the status of the West Indian
7 manatee, nothing will change. Manatees will
8 remain on the list of threatened and endangered
9 species, and certainly all federal manatee
10 protection and conservation measures will remain
11 unchanged and we will add additional measures if
12 it turns out they are needed.

13 All Manatee protection areas, including
14 speed zones and sanctuaries, will remain in
15 force, and compliance with these measures will be
16 mandatory, as it always has been.

17 In regards to the development of waterfront
18 projects, the project consultation processes will
19 remain unchanged. We certainly foresee that
20 conservation efforts will continue into the
21 foreseeable future. And there are certainly some
22 challenges here in the Southeastern United States
23 of concerns about warm water, and we, most
24 assuredly, will be continuing to work on such
25 things.

1 In regards to where we are in the process,
2 as you know, you're here today to provide public
3 comments on our proposal to reclassify the West
4 Indian manatee. Delores has been very succinct
5 in telling you that your comments will be duly
6 noted, and we will consider those in our
7 evaluation and development of the final action.

8 Not only are you able to make comments here
9 this evening, but there are certainly
10 opportunities to submit comments either
11 electronically or through the U.S. Mail. We'll
12 leave this up, if you care to write this down,
13 and will certainly look forward to not only
14 getting your comments here this evening but
15 certainly whatever you may have to send us, you
16 know, either through our Web site or through the
17 U.S. Mail. Thank you.

18 MS. YOUNG: We now come to the major portion
19 of tonight's hearing: Public Comment. Do we
20 have any Senators, congressmen, congresspersons,
21 elected officials, or representatives of federal,
22 state, and local government? We normally allow
23 those individuals to speak first.

24 (No response.)

25 If not, we will move forward.

1 As I said, I will call two names at a time.
2 The first name will go up directly to the podium.
3 The second name will be a backup speaker and is
4 to be seated in the seat right behind the podium.

5 Also, please be reminded of our time frame
6 and adhere to the lights being displayed by our
7 automatic timer.

8 Diane Morgan. Terry Nearing.

9 MS. MORGAN: Good afternoon. Thank you for
10 allowing me to speak today. You've all been very
11 kind. So my name is Diane Morgan. I am a member
12 of the Save the Manatee Club and I'm a board
13 member of the Pelican Island Audubon Society. I
14 am the manatee docent at the Fort Pierce Manatee
15 Observation and Educational Center, and I am a
16 volunteer for you guys in the U.S. Fish and
17 Wildlife.

18 You know, Florida manatees evolved in a kind
19 of Eden, a delightful underwater garden, calm and
20 peaceful. They -- they lived an idyllic
21 existence in the world rich in seagrass, clear
22 estuaries, and warm springs. Their leisurely
23 lifestyle and their very slow reproductive
24 strategies is perfect for life in the slow lane,
25 as they serenely share the waters with

1 alligators, sharks, and dolphins. Then we show
2 up.

3 We're the only predators that the
4 defenseless manatees have ever known, and boy are
5 we good at it. We've shot them, eaten them, hit
6 them with boats, mangled them with crab and
7 fishing lines. We've chased them and ridden them
8 and dragged them out of the water so our kids
9 could sit on them for Facebook.

10 Manatees suffer every day from our cruelty,
11 greed, and ignorance. I've held the flipper of a
12 dying manatee in my hand. I have seen how
13 bravely they have endured the massive injuries
14 caused by boat strikes, injuries that are so
15 devastating and looks as if they've been hit with
16 an IED, and boats are still the single greatest
17 killers in our state where we met.

18 By classifying mana- -- manatees as
19 endangered, we've made progress in helping the
20 population recover their numbers, but growing
21 numbers don't tell the entire story. So long as
22 their environment remains vulnerable, so do
23 manatees, and that's where you hurt them the
24 most. Not content with attacking manatees
25 directly, we've watched developers swallow their

1 homes, we've stolen their warm springs, we've
2 polluted their rivers, we've filled up their
3 estuaries with trash and toxins. They don't
4 deserve this.

5 The truth is, so long as there is a vast
6 human population in Florida, the manatees need
7 our help to survive. They're one cold snap, one
8 red tide, one UME away from a final decline. It
9 is a terrible disservice to them to allow this to
10 continue to happen.

11 Out of time. Thanks.

12 MS. YOUNG: Thank you very much.

13 MR. TERRY NEARING: Hello. Terry Nearing, a
14 long-time New Smyrna Beach resident. There has
15 been some hard-fought-for progress made in the
16 manatee population, but that progress is
17 extremely random and tenuous. Unfortunately,
18 this downlisting proposal threatens to unravel
19 all that has been accomplished in decades of
20 work, more an act of crass political science than
21 biological science, more happy talk and not
22 nearly enough reality.

23 It does not please me to have to say that it
24 looks like the Service came to a conclusion
25 first, then used bad data and bad thinking to

1 support that conclusion. Why do I say that? To
2 begin with, the analysis you've used to determine
3 species viability relied too heavily on
4 scientific -- unscientific models for population
5 data while ignoring much more important data and
6 facts that should be integral to any decision.
7 For example, you didn't include the massive
8 die-off that occurred in 2013, and maybe even the
9 one in 2011, in your analysis.

10 In each of those years about 15 percent of
11 the manatee population died. But worse than that
12 and perhaps more revealing, you chose to ignore
13 all the obvious growing threats to manatees,
14 growing due to expected increases in the Florida
15 human population and increased pressure from
16 development and anti-government interests,
17 threats to their habitat, threats to naturally
18 warm refuges, threats looming in the near future
19 from decommissioning old power plants which now
20 offer critical warm-water protection for manatees
21 in the winter, threats to outbreaks of red tide,
22 threats from the seagrass die-offs, threats from
23 boating and other human activities.

24 But the worst threat of all currently now
25 comes from an agency that has chosen to simply

1 ignore its responsibilities and all the unsolved
2 and growing perils to this truly endangered
3 species.

4 I see this proposal as little more than a
5 cave-in to billionaire-funded anti-manatee
6 special interest pressure. Choosing to downlist
7 at this time is premature and clearly political,
8 ugly and destructive comments are already being
9 bandied about the state in an effort to weaken or
10 completely do away with manatee protections.

11 I am hoping, in their final analysis, the
12 Service still has enough integrity to say a big
13 N-O to this proposal. Thank you.

14 MS. YOUNG: Thank you.

15 Please forgive me if I mispronounce your
16 name. That is why it's important when you
17 approach the podium to state your name and to
18 spell your name, so that you are correctly
19 identified by the court reporter in the
20 transcript.

21 Amy Wieck. Karen Ann.

22 MS. AMY WIECK: Hi. Amy Wieck, Florida
23 native. First of all, thank you for having us
24 and the presentation and explaining different
25 topics of concern with us. As a concerned

1 citizen, I've been looking both at the FWC Web
2 site and the State manatee Web site, and I feel
3 that the downlisting is premature. Just looking
4 at the numbers of Florida manatees, which is
5 approximately over 6,000 -- and I'm speaking --
6 talking about the Florida ones -- it just doesn't
7 seem like enough calves could be born to
8 adequately replace the numbers that we lose each
9 year, which often is a minimum average of about
10 400 manatees.

11 While the manatees have increased in their
12 numbers over 20 years, please, I just want
13 everyone to remember that a female only gives
14 birth to one calf every two to three years, and
15 that's after she reaches maturity. So they're
16 very limited on how fast they can add to the
17 population. Thank you.

18 MS. YOUNG: Thank you.

19 MS. KAREN ANN BUNCE: Good afternoon. My
20 name is Karen Ann. My last name is Bunce, B as
21 in boy-U-N-C-E, and I'd like to thank you for
22 this time. I am basically just questioning the
23 why. If nothing's going to change, why change
24 it? And I understand, from talking earlier, you
25 know, it's a matter of justifying, but I think

1 maybe we need to change the rules a little bit
2 or -- or change the way you decide or maybe just
3 put it all together, they're endangered and
4 they're threatened, and leave it at that. I
5 think it's a dangerous thing to change it.

6 Thank you very much.

7 MS. YOUNG: Thank you.

8 David Wiggins. Jana Wiggins.

9 MR. DAVID WIGGINS: David Wiggins,
10 W-I-G-G-I-N-S. I just want to state that I don't
11 believe that it's time to change the status of
12 the manatees. I think there's just not quite
13 enough evidence to support and determine,
14 especially based on the definitions that I saw,
15 what classifies something as being on the verge
16 of extinction. We don't know those numbers, so I
17 don't know how we can make that determination at
18 this time. Thank you.

19 MS. YOUNG: Thank you.

20 MS. JANA WIGGINS: Jana Wiggins, J-A-N-A
21 W-I-G-G-I-N-S. I don't support the FWS plan to
22 downlist manatees from endangered to threatened
23 under the ESA. I find it unclear and annoying.
24 You have to be -- just to find the difference
25 between this, and then a 12-month finding cites

1 that population trends are declining or unknown
2 in 84 percent of the countries where manatees are
3 found.

4 I know that this was brought about by
5 petitions from special interest groups, including
6 the boating industry. I've seen this happen over
7 in the Clearwater area, where land developers are
8 coming in and wanting to increase the economic
9 development and take away the -- the habitats
10 along the coastline. And I just went to a
11 meeting on this, and what they're saying is, to
12 increase the economic development you've got to
13 increase -- to allow more boaters so that it
14 becomes a boating community.

15 Now, I am a boater, a sailboater, so I
16 understand that people want to be out on the
17 water, but I do not agree with changing anything
18 that has to do with protecting the manatees, and
19 I can certainly adhere to the speeds that are
20 currently in place to get to where I'm going to.

21 I see that if this is taken and downlisted,
22 that with our current legislative body, as we see
23 many species that have been taken -- been taken
24 off the list and are approved for delisting, I
25 see that what's going to happen is the

1 legislature will bend to the special interest
2 groups and make things -- laws that will change
3 the current regulations and they will not protect
4 them as much as they should. Thank you.

5 MS. YOUNG: Thank you.

6 John Warner. Elizabeth Flemming.

7 MR. JOHN WARNER: Hello. I'm John Warner,
8 W-A-R-N-E-R. I would like to say in recent years
9 manatee numbers have apparently been increasing.
10 We currently estimate there are about 6,000
11 manatees in Florida. Of those, perhaps 1/3 are
12 breeding-age females, meaning that in a good year
13 500 calves may be born.

14 Unfortunately, in two recent years the
15 deaths have greatly outnumbered -- out -- have
16 greatly outnumbered the births. In 2009, 830
17 manatees died; in 2013 it was 766. In four of
18 the last ten years deaths have exceeded 400.
19 This does not provide much opportunity for the
20 slowly producing manatee to increase their
21 numbers.

22 Threats to manatee survival have not abated
23 and are not likely to in the future. More boats
24 are registered in Florida every year. The
25 frequency of severely cold winters may increase

1 due to climate change. Red tide is always a
2 threat. The recovery of seagrass in their lagoon
3 is spotty at best. There -- oh, and there's
4 plenty of fishing line, indescribably through a
5 large tangle of manatees and other wildlife.

6 Downlisting manatees, based on simply a
7 modest increase in numbers, is definitely
8 misguided. In fact, there's been no evidence
9 that 6,000 manatees constitutes a healthy
10 population.

11 I work as a volunteer at the Manatee
12 Observation and Education Center in Fort Pierce.
13 We have many visitors there from across the
14 country and around the world; that is, our
15 visitors wish very much to see manatees and are
16 very pleased to see them when we can show them
17 some.

18 Florida and the rest of the world will be a
19 poorer place if there are no manatees for people
20 to see and enjoy. Let's keep protecting these
21 wonderful animals and not allow shortsighted
22 special interests to endanger their survival. If
23 you change their classification, you will allow
24 more opportunity for -- for threats to change
25 their -- their protections.

1 MS. YOUNG: Thank you.

2 MS. ELIZABETH FLEMING: Good afternoon. I'm
3 Elizabeth Fleming with Defenders of Wildlife, and
4 that's F-L-E-M-I-N-G.

5 We will be submitting detailed comments
6 during the comment period. We're working with an
7 independent expert to help us analyze the data,
8 information, and the two PBAs and form our own
9 conclusion about whether or not we agree with
10 your proposal.

11 I do want to say a few words about
12 protection. It is very important that the
13 protections that manatees have now, that have
14 allowed them to increase and improve in their
15 status, remain in place, and I do believe that
16 the U.S. Fish and Wildlife Service and all of you
17 are very well-intentioned when you state that
18 they will remain in place.

19 They may not remain in place, and the ink
20 wasn't even dry on the Federal Registry notice
21 when efforts were underway in the state of
22 Florida and at the county level in Florida and
23 they're continuing, and very brazenly, during
24 this process. So if that's not a huge red flag,
25 I don't know what is.

1 And I do not think that justification of
2 those five factors -- one of them was having
3 adequate regulatory protection in place -- that
4 the Service has been able to guarantee that, and
5 so I really would like you to consider that. I
6 do think it's well-intentioned. I think it's
7 beyond your control, and if you could let us
8 implore you to overlay all the state speed zones
9 into federal zones, that would be one thing that
10 you could do to ensure that the speed zones don't
11 go away.

12 Anyway, that is our biggest concern right
13 now. And it's reality. It's not semantics about
14 protection, it's reality, and it's happening
15 right now. Thank you.

16 MS. YOUNG: Thank you.

17 Joseph Vincent Siry. Trevor M. Sorbo.

18 MR. JOSEPH VINCENT SIRY: Good afternoon.
19 Thank you for coming here today and thank you for
20 trying to do something that's not only difficult
21 but I think is premature. We'd all like to say
22 congratulations and thank you for protecting
23 manatees, but I am Joseph Vincent Siry, S-I-R-Y.
24 I am author of Marshes of the Ocean Shore, a
25 200-year study of coastal conservation in the

1 United States, and I'm treasurer of Save the
2 Manatee Club.

3 I am speaking as a historian and a professor
4 of 32 years at Rollins College in environmental
5 studies. Why is it premature? There are four
6 subpopulations of manatees in the state of
7 Florida and, according to the International Union
8 for the Conservation of Nature, those four
9 subpopulations are very different.

10 As you well know, some of them are
11 declining, right? Some are virtually at a
12 standstill, especially the Miami-Key West area
13 population. It's been stable and not necessarily
14 growing. And I will use that for you to think
15 about what's going to happen to the rest of
16 Florida when we exceed 20 million people in the
17 state of Florida, and we're on target to do that.

18 The smallest groups, in the St. Johns River
19 or in the northwest part of Florida, are growing
20 in population, but so is the population of
21 marinas in those areas.

22 I would suggest you would take them and
23 change their status if something had been done to
24 protect their habitat, but for 50 years Silver
25 Springs has been pretty much off limit to the

1 migrating manatee, the largest spring in Florida.
2 Fifty years we have tried to get manatees into
3 Silver Springs, where they used to be and they're
4 not.

5 Their habitat is declining. Seagrass beds
6 in the Indian River Lagoon, our largest estuary
7 in Florida and in the area, has serious pollution
8 problems. So it's not only premature, but you
9 heard it, I think, best stated by a member of the
10 Audubon Society, "You're one red tide away from a
11 decline in the population that cannot be
12 recovered." Thank you.

13 MS. YOUNG: Thank you.

14 MR. TREVOR SORBO: Hello. My name is Trevor
15 Sorbo, S-O-R-B-O. I'm an MBA candidate at
16 Rollins College as well. So when I looked at
17 this issue and tried to make my initial analysis,
18 I took more of a business perspective on it, and
19 I think that what you can do is you can break
20 this issue down into two core issues.

21 The first is that the number of the manatees
22 are allegedly going up. Well, if you look at the
23 S&P 500, over the past 8 years there's been
24 161 percent increase in the value of S&P 500.
25 That's great news for investors, except I should

1 mention that that record is from February 23 of
2 2008, in the depths of the great recession that
3 we recently experienced.

4 My point, ladies and gentlemen, is that if
5 you go about analysis with intention rather than
6 the purpose of discovery, you will surely find
7 and showcase the results that you want to show.

8 As far as the numbers of the manatees
9 actually going up and that this is a truly
10 sustainable population, I'd like to point out to
11 you a few facts. We are seeing an increasing
12 volume in our currents of red tide near Florida.
13 The Florida Bay has over 400 -- 40,000 acres in
14 peril, which is a critical food supply of the
15 manatees, and there's been an increasing number
16 of mortality events that the Service simply
17 cannot explain at this time. And as of today, we
18 just heard the announcement that the Army Corps
19 of Engineers now plans to dump one billion
20 gallons of toxic chemicals into the estuaries
21 where the manatees feed until at least mid-June.
22 This is not a species in recovery. This is a
23 species with significant threats to its continued
24 existence.

25 And if I may, there is also the other factor

1 that the Service quotes in that budget cuts and
2 staffing issues are why significant progress has
3 not been made, and there is also significant
4 claims that this action will show progress that
5 the Service says is necessary for its future
6 sustainment. But, we cut the recovery team and
7 we have spent two years of staffing on a
8 delisting proposal, so therefore, the budget cuts
9 and staffing issues are not a valid factor for
10 consideration.

11 My name is Trevor Sorbo. I turned 23 years
12 old yesterday, and I don't see a future for
13 Florida and I believe that we are letting it get
14 away from us. The simple fact of the matter is
15 that there are as many metrics that can look at
16 that show that there is not due diligence in
17 delisting the manatee. Thank you.

18 MS. YOUNG: Thank you.

19 Megan Sorbo and Robert Mercer.

20 MS. MEGAN SORBO: Hello, my name is Megan
21 Sorbo. I am Trevor's younger sister. My name is
22 spelled not with an H. It's M-E-G-A-N. So now
23 I'll start my speech, if you don't mind.

24 Hi. I'm here to speak on behalf of the
25 beautiful, curious, and gentle manatees. Our

1 good fortune to live in Florida comes with a
2 great responsibility to our manatees. I am truly
3 grateful for the past actions of this agency that
4 has led to the manatee population's recovery thus
5 far, but please continue with the strong plan to
6 further protect these amazing creatures and do
7 not downlist them to even a threatened status.
8 Their population numbers in Florida may have
9 increased, but that does not mean that the
10 manatees are not still in peril. I believe that
11 they face continued and increased threats to
12 their survival.

13 Last week my family was in south Florida and
14 spent a day paddling in the Florida Bay. I was
15 appalled by the visual state of the seagrass we
16 saw all day. Sadly, this is not a problem
17 isolated in Florida Bay, but these are common
18 circumstances all around Florida.

19 With the growing problems of red tide and
20 pollution, the issue of seagrass die-off is a
21 problem that will continue to increase, not
22 decrease.

23 Another distressing factor for our manatees
24 is the number of watercraft injuries or -- and
25 deaths. The no-wake zones must continue to be in

1 place. The pain from propeller injuries these
2 creatures endure due to human carelessness and
3 selfishness is sickening. Besides propeller
4 injuries, the impact of a boat striking a manatee
5 is the equivalent of a human being, being struck
6 by a moving bus.

7 Would anyone here like it if they were
8 sitting in their own home, harming no one, and a
9 bus came smashing through their front door and
10 into them and then just kept driving on through
11 the back door with no regard whatsoever to the
12 damage and pain caused? I highly doubt anyone
13 would like that, but that is just what happens to
14 manatees every day. More boats than ever before
15 are in our waters; therefore, manatees are facing
16 an increasing risk to their health and survival.

17 It is not reasonable to assume the threats
18 to manatees will remain the same in coming years,
19 when it is clear that the exact opposite is true.
20 I implore you to maintain to focus on our
21 manatees' ultimate well-being. Please continue
22 strong protection for these beautiful and gentle
23 creatures. Thank you very much.

24 MR. ROBERT MERCER: Before I start, that's
25 going to be a hard act to follow. I think Pat

1 Rose set that up. Thank you, Pat.

2 My name is Bob Mercer. I speak to you as a
3 conservationist and a resident of Crystal River
4 who has spent 11 years living aboard a sailboat
5 in the Caribbean. I learned a lot about the
6 importance of our oceans and estuaries from the
7 local island people.

8 Recent discussions regarding manatees
9 themselves were brought up and were answered and
10 indoctrinated in the question-and-answer
11 publication produced by the Service regarding the
12 subject of reclassification. I, and many of the
13 public, expect the Service to adhere to the
14 Endangered Species Act, which mandates the
15 Service to protect each species based on
16 unbiased, scientific evidence, not on how popular
17 or beautiful or loveable the species is.

18 They expect the public-paid professionals
19 and experts of this agency to do as described by
20 their elected representatives and do their job
21 impartially. They have also seen that happen
22 with our national bird, the American Bald Eagle,
23 the wood stork and the American alligator, all of
24 which have been removed or reclassified and still
25 had protections to preserve their continued

1 existence and population sustainability.

2 I've heard mentioned a number of times our
3 habitat. Save Crystal River diverted its effort
4 to restoring the warm water habitat that we so
5 fortunately have for all species, including our
6 beloved snowbirds, the manatees, in Crystal
7 River.

8 Crystal River/Kings Bay is dying to the
9 point there is little, if any, beneficial
10 submerged aquatic vegetation left for food and
11 shelter for the many inhabitants of this Florida
12 outstanding waterway. What little bit is
13 available is consumed by an ever-increasing
14 manatee population. Recognizing this condition,
15 the FSCR has worked tirelessly to restore the bay
16 and the natural warm water habitat, providing for
17 the growth and striving for an overall healthy
18 ecosystem.

19 In conclusion, I believe we need to direct
20 our human and financial resources to those cases
21 of the flora and fauna that are scientifically
22 identified as those needing our assistance with
23 an emphasis on the habitat they reside in. Thank
24 you.

25 MS. YOUNG: Thank you.

1 Patrick Rose and Helen Spivey.

2 MR. PATRICK ROSE: My name is Patrick Rose.
3 I'm the executive director and aquatic biologist
4 for Save the Manatee Club. I'm going to bag my
5 prepared speech with two minutes. Let me get
6 some official requests out of the way. I wanted
7 to officially request that the models used by the
8 Fish and Wildlife Service in preparing
9 assessments for the proposed reclassification be
10 made available to us, and any member of the
11 public who might request them, so that we might
12 examine them and to, in essence, look at and know
13 what you relied upon in making your
14 recommendation. So that is a formal request and,
15 I believe, in not, you know, fulfilling that
16 request, it would be in violation of the
17 administrative law. So we would put that on the
18 record. We want to defend that position of being
19 able to have that information available.

20 That being said, I can't sort of miss the
21 opportunity to talk about a little bit of the
22 Save Crystal River. I think -- I hope it's going
23 to become a conservation organization, but they
24 are the organization that did inspire the lawsuit
25 to challenge the Agency in terms of reclassifying

1 the manatee. They're also an organization that
2 proposed to have all of the state regulations for
3 manatees removed from all of Kings Bay. They're
4 an organization that has been asked to cease and
5 desist their activities by the Corps of Engineers
6 in terms of polluting Kings Bay.

7 They've now recently turned more to helping
8 to increase the water quality in the bay and do
9 some improvements. I do hope that continues in
10 that.

11 Finally, I'll just say I don't believe there
12 is sufficient evidence available in terms of the
13 scientific information to support your conclusion
14 that manatees should be downlisted, either the
15 Florida manatee or the subspecies, or Antillean,
16 and we would put on the record some very
17 extensive comments during the rest of the opening
18 comment period.

19 And finally, if you do update the model and
20 do update your information, we formally request
21 that you open a new public hearing opportunity,
22 or at least a public input opportunity, in order
23 for the public to give feedback on what new
24 information you might utilize in your
25 decision-making. With that I'll end my comments

1 today. Thank you.

2 MS. YOUNG: Thank you.

3 MS. HELEN SPIVEY: I'll make it.

4 Thank you. My name -- my name is Helen
5 Spivey from Youngstown, Florida. I cannot
6 support the Service's wanting to downlist the
7 manatee from endangered to threatened when
8 there's -- from 2010 to 2015, 3,217 manatees died
9 in Florida.

10 I'm frequently asked why so many manatees
11 winter in the Chassahowitzka, Homosassa, and
12 Crystal River area. It's easy to understand, if
13 you look at all the development in the south, yet
14 no plans have been made to help the manatees
15 adapt from losing the coastal electric plants.
16 And also, how are you going to train thousands of
17 manatees to use a different winter spot?

18 You'll see all around views of manatees
19 jammed in the sanctuaries. You'll also see
20 swimmers jammed outside. People have done it for
21 years. Why are they doing this? Well, they're
22 hoping the manatee will come out to eat and that
23 they can pet it or play with it. These swimmers,
24 sadly, have never considered the fact that when
25 they arrive outside the ropes, the manatees don't

1 rush to play with them. It's a question they
2 should really answer.

3 A few years ago the Florida Fish and
4 Wildlife Conservation Commission held a meeting
5 at the Plantation, and they discussed with all of
6 the enforcement people from all the agencies the
7 harassment of manatees. The solution they came
8 up with was, they could enforce it almost cost
9 free if the manatees could not be touched. The
10 Fish and Wildlife Conservation Commission agreed,
11 and nothing has ever happened. Thank you.

12 MS. YOUNG: Thank you.

13 Captain Stacy Dunn and Phillis Rosetti.

14 MS. PHILLIS ROSETTI: I'm going to decline,
15 Phillis Rosetti.

16 MS. YOUNG: Okay. Thank you.

17 CAPTAIN STACY DUNN: Good afternoon, ladies
18 and gentlemen. My name is Captain Stacy Dunn,
19 D-U-N-N, a long-time volunteer from Crystal River
20 for the U.S. Fish and Wildlife Services and the
21 Wild -- Florida Wildlife Conservation Commission
22 and other organizations like USDS and Sea to
23 Shore, who have all studied the manatees.

24 I do not support the Service's plan to
25 downlist the West Indian manatees from endangered

1 to threatened at this time. I've been to -- at
2 least three times to assist with the capturing of
3 an Antillean manatee and the humble effort to
4 teach the area about the importance of manatee
5 conservation there.

6 I've seen one of the head biologists from a
7 little boy up to his position now as a top
8 biologist in the area of the protection of
9 manatees. He explained how many of them die from
10 the cruise ships offloading their travelers onto
11 powerboats to get them quickly back and forth to
12 the towns for shopping and so forth, speeding
13 through the water, but he's working on that.

14 My voluntary services are mostly the
15 rescuing and the recovery of manatees in Citrus
16 County; been doing it for over 10 years. 2016
17 has not started well. Just to give you a look
18 into my last two weeks, it's been like this:
19 February 12th, baby carcass recovery;
20 February 15th, rescued a severely cold, stressed
21 animal. February the 15th, that same day, that
22 afternoon a baby manatee recovery. And when I
23 got home, I also had two messages from local
24 residents who thought they had injured manatees
25 in their backyard.

1 Let me remind everyone that we have made
2 strides toward protecting manatees, a
3 slow-reproducing animal. I want to also remind
4 everyone, hey, they were here before we were.

5 As most humans think that we own the entire
6 waterways and they're all ours, as a reminder, in
7 recent years we had some really bad mortalities.
8 In 2010 a lot of them died due to cold stress,
9 766, to be exact, according to the FWC's
10 mortality records; and in 2013, just recently, a
11 whopping record of 830, many of those to red
12 tide.

13 Folks from around the world come to see the
14 manatees. I see them every day in my own touring
15 business. Don't the manatees deserve a little
16 better? I hope one day in the future we can say
17 that we've seen the impact of protecting the
18 manatees -- but in my opinion this downlisting is
19 premature. Thank you.

20 MS. YOUNG: Thank you.

21 Sandra Clinger and Arthur Eickenberg.

22 MS. SANDRA CLINGER: Sandra Clinger,
23 C-L-I-N-G-E-R. I live in Brevard County. Due to
24 the time limitations, I'm only going to address a
25 few issues, and I will be submitting written

1 comments.

2 The U.S. Fish and Wildlife Service has based
3 your intent, as you said in your report, on a
4 stable or growing population, threats to manatees
5 have been reduced or stable, and threats to
6 habitats have been reduced or controlled. I
7 don't believe that's the case.

8 For the past 20 years the fight fought for
9 manatees has certainly helped the population
10 prevail. They have not reduced the ongoing and
11 future threats manatees face.

12 If only -- you only have to look at the past
13 six years of the manatee mortality table, which
14 is not included in the assessment thus far, to
15 see that just how quickly threats become
16 unsustainable, and I'm not sure of their time
17 table, the one right here.

18 The U.S. Fish and Wildlife Service, having
19 currently incorporated the most recent scientific
20 data into their models, it doesn't take a
21 mathematical model, however, to figure the
22 current levels of mortality are not sustainable.

23 If you have an estimated population, as we
24 now do, of 6,350 manatees, which includes 2,822
25 in a five-year period, even if you apply the

1 insanely optimistic and the highest document --
2 documented annual population growth rate for the
3 upper St. Johns to those numbers and look at
4 these five years of mortality, you still end up
5 with a decline in population.

6 The 12-year review calls deliberately for
7 raising their mortality by saying, oh, we've had
8 a -- we had an under-synoptic survey, the same
9 synoptic surveys that we've said have so many
10 biases included in them that we don't know the
11 basis for the population estimation.

12 While I pick up on very valuable insights,
13 however, they are always limited by the
14 reception, the caveats of the data. Each year we
15 have hurricanes that form in the Atlantic. The
16 weather center puts up a variety of models. Most
17 of the models are widely divergent.

18 If you choose one, and only one, and it was
19 the wrong one, the implications could be dire.
20 This is why the ESA has been cautionary in its
21 approach to recovery. The stakes for the
22 manatees are high. While the core biological --
23 biological model looked at relative impact -- I
24 will stop here and say some new information that
25 you should be aware of is that there is recent

1 water quality data from the Indian River
2 Lagoon --

3 MS. YOUNG: Thank you for your comments.

4 MS. SANDRA CLINGER: -- okay, the brown
5 algae is back.

6 MR. ARTHUR EICKENBERG: Good afternoon. My
7 name is Captain Arthur Eickenberg,
8 E-I-C-K-E-N-B-E-R-G, and I stand opposed to
9 removing the manatees' endangered species
10 designation. I am a licensed Merchant Marine
11 officer and I've been boating in Florida's water
12 for almost 50 years, during which time I have
13 never been adversely impacted by having to
14 proceed with caution around any manatee.

15 I became involved in volunteering for Saving
16 the Manatee as a result of observing boaters
17 continually displaying a complete lack of concern
18 for the safety of the creature in the no-wake
19 zones behind my home; yet, with all our
20 educational effort, boaters are still one of the
21 biggest causes of manatee injuries and death.
22 Slow speed and no-wake zones in many areas are
23 not only designated to protect manatees but also
24 protect waterway shoreline property, including
25 private property, from boater-induced erosion.

1 So this downlisting, theoretically, would not
2 have any effect on their -- on the existence,
3 except if the proposal goes through and manatees
4 are no longer endangered, quote, unquote.

5 One Brevard County commissioner publicly
6 proclaims he plans to get rid of slow-speed boat
7 zones for boaters altogether. That would be
8 equivalent to an open season on manatees.

9 Now, because manatee numbers have reached an
10 abstract plateau, the effort to remove them from
11 the protection of being an endangered species
12 defies logic. No adequate period of proof that
13 their number will remain at this level has been
14 experienced. Projections of such are admittedly
15 based on flawed data. Any red tide outbreak,
16 significant cold weather event, the inevitable
17 number of boating accidents, and the continued
18 removal of warm water refuges can easily see
19 their numbers drop rapidly below this imaginary
20 threshold, and then it will take an act of
21 congress to get them back to their endangered
22 status. Thank you.

23 MS. YOUNG: Thank you.

24 Douglas M. Brown and Swagatika Sarangi.

25 MR. DOUGLAS BROWN: My name is Douglas

1 Brown, B-R-O-W-N. Thank you for the opportunity
2 to speak against the downlisting of the manatee.
3 I want to try and secure their future. I still
4 think that manatees are seriously endangered.
5 I'm basing this opinion on 25 years' experience
6 as a law enforcement officer.

7 I took a look at the Florida roadway traffic
8 statistics for 2014 to compare waterway
9 fatalities and injuries to highway crashes. As
10 of 2014 there are 15.6 million licensed drivers
11 and over 19 million registered vehicles in
12 Florida. In 2014 there were approximately
13 344,000 traffic crashes in Florida, so drivers
14 had a 1-in-4 chance of being in a crash that
15 year.

16 Of the traffic crashes in 2014, 150,000 were
17 injury crashes, so drivers had a 1-in-10 chance
18 of being injured in a crash in 2014. 2,494
19 people were killed in Florida roads -- on Florida
20 roads in 2014, so drivers had a 1-in-625 chance
21 of dying in traffic two years ago.

22 Florida waterways had 899,000 registered
23 vessels during 2014. Florida FWC reported 634
24 vehicle -- vessel crashes in that year, so
25 boaters had a 1-in-1,500 chance of being in a

1 crash. 365 of those vessel crashes were injury
2 crashes, so injure -- so boaters had -- in 2014
3 had a 1-in-2,400 chance of being injured in a
4 vessel crash. In 2014, 73 people died in vessel
5 crashes, so boaters had a 1-in-12,000 chance of
6 dying while boating.

7 So now let me quickly talk about the
8 manatee. 2015, record manatee population, 60 --
9 6,000; 405 manatee deaths in 2015. So a manatee
10 had a 1-in-14 chance of dying that year.

11 Every manatee in Florida still alive is
12 identified by the scar patterns from non-fatal
13 boating accidents. Manatees can't afford to be
14 downlisted.

15 MS. YOUNG: Thank you.

16 MS. SWAGATIKA SARANGI: Good afternoon. My
17 name is Swagatika Sarangi, S-A-R-A-N-G-I. I
18 moved to this country three years ago to study
19 business at the University of Florida, and now I
20 am working in Tampa as a business analyst. As I
21 belong to the country India, where because of
22 environmental and population issues human safety
23 in society (unintelligible) like animals,
24 environmental protection has been a questionable
25 thing there, so seeing this thing has been really

1 active, I really appreciate what you guys are
2 doing, so thank you for that.

3 Moving forward to the two statistics that I
4 was able to understand was, in the year 1991,
5 with the synoptic survey, there has been -- the
6 number that was counted 1,200, and right now it's
7 6,315. There has been a really good amount of
8 increase in the 20 years.

9 There is irony there, however. Going back
10 to the national statistics, 3,217 is the amount
11 of losses that we have had from 2010 until now --
12 2015, actually -- in five years -- which is 53
13 percent of losses in those 5 years.

14 So if we compare these two statistics,
15 then -- going back to the endangered as well as
16 threatening has been -- is going to be
17 implemented is one of the questions, then my
18 suggestion would be, even though we do have a
19 line of difference between these two, we do have
20 major concerns with the statistics being taken
21 into accounting. So that's all I would have to
22 say. Thank you.

23 MS. YOUNG: Thank you.

24 Dana Kovar and Dr. Katie Tripp.

25 MS. DANA KOVAR: Good afternoon. My name is

1 Dana Kovar, D-A-N-A K-O-V-A-R. I am a
2 volunteer for the Save the Manatee. I have also
3 volunteered for other environmental groups like
4 The Nature Conservancy. I'm also an
5 environmental engineer, so I understand water
6 quality issues due to human activity. I don't
7 support the Service's plan to downlist the West
8 Indian manatee from endangered to threatened.

9 We all know that from 2010 to 2015, 3,270
10 manatees died in Florida waters, and this not
11 sustainable. The Service's decision is based
12 upon a computer model that doesn't include recent
13 massive die-outs of manatees from red tide and
14 cold weather events and a recent die-off on the
15 East Coast.

16 The computer model also does not take into
17 account the burden of human population growth in
18 the years to come. We all know that this is
19 going to be a huge problem. How can you consider
20 all the threats to the manatee when we're not
21 considering human population growth? And I've
22 discovered this earlier after talking to
23 Mr. Williams. Thank you for the information, by
24 the way.

25 I -- I -- I don't -- I don't support this.

1 The burden of human population growth, it will
2 increase mortality rates due to algae pollutants,
3 from increased nitrogen levels from septic tanks
4 and fertilizer runoffs, human activity due to
5 boat collisions and habitat loss. All of this is
6 going to get worse with human population growth,
7 and the computer model does not take this into
8 account. I believe this downlisting is very
9 premature. Thank you.

10 MS. YOUNG: Thank you.

11 DR. KATIE TRIPP: Good afternoon. Katie
12 Tripp, Director of Science and Conservation Save
13 the Manatee Club. I'm here today to express our
14 opposition to the current downlisting proposal.
15 The Service has not done sufficient data to
16 justify reclassification of the entire West
17 Indian manatee species, as it as yet has not
18 demonstrated that the species is no longer
19 endangered throughout a significant portion of
20 its range.

21 For the Florida manatee, the finding does
22 not adequately address the anticipated future
23 loss of artificial warm water. Upwards of 4,000
24 Florida manatees use power plant outfalls.
25 That's a lot of sea cows to move around, and

1 where will they go and how will you get them
2 there? This is the single greatest management
3 challenge this agency will ever face, and it's
4 going to take years, if not decades, and a lot of
5 work and money to figure out.

6 The Service's statement that downlisting
7 won't reduce protections is not that simple.
8 Many of the rules and laws to protect manatees in
9 Florida are not federal. The Service also has no
10 control over how the State of Florida chooses to
11 allocate resources after a downlisting and even
12 acknowledges this in their 12-month finding.

13 It has taken a great deal of effort to
14 increase the manatee population, but it's what we
15 do next that decides whether manatees succeed or
16 fail. This is the crossroads. It's past due to
17 develop a vision for the future of this species.
18 What does a recovered manatee population in
19 Florida look like? How do we get there?

20 The new roadmap will need commitments for
21 every stop along the way. The Service needs to
22 immediately start work updating the Florida
23 Manatee's Recovery Plan with the help of
24 reinstating a recovery team and set improved
25 recovery criteria. Among the key recovery teams

1 recommended to reinstate is the Warm Water Task
2 Force to develop a contingency plan in regards to
3 helping define what is the Service committed to
4 do to secure a future.

5 I went to work for Save the Manatee Club
6 because I wanted to be part of the solution for
7 manatees. I wanted to be a part of the team that
8 solves these big issues and recovers the species.
9 We want to work with you to secure the future of
10 these animals and their habitat. Downlisting
11 comes after that hard work, not before it.
12 Secure the future, delay the downlisting, and
13 let's get to work on solving before it is done.
14 Thank you.

15 MS. YOUNG: Thank you.

16 Kelly Hodoval and Arthur Tamison.

17 MS. KELLY HODOVAL: Hello. Kelly Hodoval,
18 H-O-D-O-V-A-L. I'm Kelly. I'm a Florida native.
19 I have lived in Orlando, Tampa, Jacksonville, and
20 Gainesville, and I study engineering, and I do
21 not support this downlisting.

22 I want to implore you to please be very
23 effective and thorough and honestly consider all
24 evidence. In my studies and in my work, I have
25 worked on a lot of models, whether ground water

1 models, nutrient models, sea level rising models,
2 and leaching models, and one resounding constant
3 that we have faced is that when modeling, models
4 are not comprehensive and rarely do they
5 represent reality, and you even have acknowledged
6 that this current model doesn't account for the
7 coastal development and it doesn't account for
8 population growth.

9 The Florida Chamber of Commerce has
10 projected that the Florida population will
11 increase to 26 million by 2030; that, along with
12 economic growth, means that we are going to have
13 a lot more commercial boating and we are going to
14 have a lot more private boating. We're going to
15 have a lot more commercial fisherman out on the
16 waters. We're going to have more cruise ships,
17 and we are going to have more ocean and
18 water-related activities.

19 You say you want to consider the overall
20 population and threats for the West Indian
21 manatee, so let's consider it. So we have this
22 population growth that was anticipated, with the
23 development that's increasing. We also have the
24 realistic point of view that a lot of the
25 subspecies are isolated. They don't interbreed.

1 They don't breed with each other. So we don't
2 have the diversity in their gene pool like we
3 would want to see in a healthy population. We
4 know that the numbers from South America and
5 Central America are not necessarily reliable. We
6 understand that they are poached and hunted there
7 as well.

8 We see that the cold snaps are going nowhere
9 and that red tide and population -- and pollution
10 are problems, and I implore you to be reasonable
11 and take the time and precautions and help secure
12 their future.

13 MS. YOUNG: Thank you.

14 Jennifer Marquez. Ann Harvey Holbrook.

15 MS. JENNIFER MARQUEZ: Good afternoon,
16 everybody. My name is Jennifer, double N, last
17 name Marquez, M-A-R-Q-U-E-Z. So I'm here today
18 not only as a scientist, but I'm here as a
19 25-year Florida native and a free diver who has a
20 very deep affinity for these animals.

21 I, a couple weeks ago, before Blue Springs
22 was closed to the public, I had an opportunity to
23 swim, and I was approached and followed by a baby
24 manatee for about an hour back and forth, and
25 that actually gave me a lot of insight as to how

1 vulnerable these animals are.

2 I have no doubt that if this
3 reclassification goes through, that our Florida
4 legislators are going to pass bills that are
5 going to allow these protections that we have put
6 in place for all these years to just diminish.

7 I worked with the legislature for four
8 years. I don't trust our legislature with any
9 animal-related issues. The Humane Society
10 scorecard came out, and it actually rated our
11 legislators in terms of what they've done to
12 protect our animals, and I would state, you
13 know -- I would actually ask everybody to check
14 it out. It's embarrassing, and I'm ashamed to
15 live in my own state after seeing those numbers.

16 Just to sort of go back to being objective,
17 I have no doubt that our legislators' significant
18 support of downlisting will be approached by land
19 developers to -- land developers, landowners, and
20 boating-related -- or, boating industry
21 individuals, who are going to try to get them to
22 pass this legislation. I have no doubt that
23 that's going to happen. They're going to flock
24 to the legislative offices, wine and dine them.
25 They haven't taken into consideration their

1 impact on these animals.

2 As a boater, I actually spent a substantial
3 amount of time out on the water, and I have never
4 complained about once having to slow down in a
5 slow-speed zone. It's absolutely necessary. And
6 I think it's embarrassing to have boaters who are
7 complaining about having to slow down. God
8 forbid you would have to do so to protect an
9 animal's life. I think it's ridiculous.

10 And I want to express that I'm curious if it
11 was your agency's decision to hold only one
12 public meeting on this matter, when we clearly
13 have people on opposite ends of the state that
14 would love to be able to stand here, like I am
15 today, to get their opinion across. So I would
16 ask you to please hold at last a minimum of two
17 additional meetings, one in north Florida and one
18 in south Florida, so that these individuals have
19 a chance to discuss their concerns with you.

20 MS. YOUNG: Thank you.

21 MS. ANN HARVEY HOLBROOK: Ann Harvey
22 Holbrook, and that's H-O-L-B-R-O-O-K, staff
23 attorney for Save the Manatee Club. The Fish
24 and Wildlife Service's proposal to reclassify the
25 West Indian manatee does not conform to the

1 requirements of the Endangered Species Act.
2 Under the act, the term "endangered" means a
3 species which is in danger of extinction
4 throughout all or a significant portion of its
5 range.

6 The Service found that population trends are
7 declining or unknown in 84 percent of the
8 countries where manatees are found. It's
9 therefore, arbitrary and capricious to assert
10 that the West Indian manatee is not in danger of
11 extinction in a significant portion of its range.

12 Moreover, the Service is not under
13 regulatory requirements of that five-part
14 analysis discussed earlier. The manatee is
15 threatened by habitat destruction throughout the
16 entirety of its range. Warm water springs,
17 essential to manatee survival, are threatened by
18 reduced flows, poor water quality, and increasing
19 development, while existing artificial warm water
20 sources are likely to become unavailable in the
21 near future.

22 Manatees are also threatened by
23 overexploitation, including poaching, and while
24 genetic diversity decrease -- increases their
25 susceptibility to disease. The adequacy of

1 protection measures vary greatly across this
2 range, and in the U.S. manatees face great
3 threats from reduced state and local protections.

4 Watercraft collision, as one of the primary
5 threats to manatee survival, are on the rise.
6 The percentage of these threats makes downlisting
7 premature.

8 Furthermore, the reclassification is not
9 based on the best available scientific and
10 commercial data, as required by law. As
11 discussed earlier today, the core biological
12 model on which the Service heavily relies does
13 not include the extreme mortality events of
14 recent years. The Service has, therefore, not
15 been able to address whether these events will
16 negatively affect population growth or adult
17 survival rates.

18 Moreover, the model depends upon the
19 assumption that current threats will remain
20 constant indefinitely, but the best available
21 science and commercial data indicate that threats
22 to manatees will increase.

23 Development of boating activity in
24 particular are expected to increase throughout
25 the manatee's range. Most significantly, the

1 model is unable to account for decreased access
2 to winter warm water habitat. It, likewise, does
3 not account for the unpredictable impacts of
4 climate change, which may include drought; cold
5 weather events; and conditions favorable to red
6 tide.

7 The Service must delay downlisting until
8 cumulative threats to the species have been
9 addressed and until, based on the best available
10 science, the manatee is no longer endangered in a
11 significant portion of its range. Thank you.

12 MS. YOUNG: Thank you.

13 Nicole Shearer. Debra Lynn Brown.

14 MS. NICOLE SHEARER: My name is Nicole
15 Shearer, S-H-E-A-R-E-R, from Hillsborough County.
16 It's one of the two facilities down near Apollo
17 Beach in particular that they're talking about
18 shutting down because it's a coal plant. This is
19 also one of the places where the manatees go to.
20 When it's cold, they gather around and they warm
21 up, so the cold season is big down there. It's a
22 lovely thing.

23 Unfortunately, if the plants close up, there
24 might be numerous others across the state. So
25 right there is one reason why we need to continue

1 to protect these animals. We're taking away
2 their protection just by shutting down plants
3 that offer them refuge, clean or not clean.

4 The increased amount of development here in
5 Florida, with the increase of people coming in,
6 is also causing an increase in boat sales,
7 increase in pollution, fishing line
8 entanglements, all sorts of things that are going
9 to cause red algae blooms and boat strikes.

10 Boat strikes. You know, there's nothing
11 like direct action, and we have so many people in
12 this room that have been working directly with
13 these animals, with these manatees that are
14 sentient beings. They don't have pride and ego
15 like we do. Pride and ego is a man-created
16 thing. While we're trying to create an Eden for
17 humans here in Florida, we are deconstructing the
18 Eden that has been here long before we existed.

19 We are destroying property that belongs to
20 Florida, not us. These animals deserve to have
21 their land. These animals have the right to live
22 and they're worth fighting for, and by
23 downgrading them, it's not moving them up. It's
24 not moving them off the endangered list. It's
25 not a good thing to downgrade. But by

1 downgrading them, you're telling people they're
2 not important, it's okay, they're going to
3 survive without our help because, unfortunately,
4 unless people are educated and realize the
5 difference -- you say nothing changes, but to the
6 average person on the street, when you say it's
7 just threatened, that means something. When you
8 tell them it is an endangered species, that means
9 something more. It's powerful. There's power in
10 words. The power in the numbers aren't accurate.

11 2007 until 2012 are not accurate for what's
12 going on in 2016. In 2013 we lost over 800
13 manatees. We have lost 43 so far just in January
14 of this year. Last year it was 35. There's not
15 a trend showing that they're increasing. There's
16 not a trend that's consistent. Please consider
17 extending your study, looking at the broader
18 spectrum, putting it off.

19 If there's really no difference between
20 endangered and protected to threatened, then
21 what's the difference, honestly? How do we know
22 what that magic number is that says that the
23 manatees have reached a sustainable state? Thank
24 you.

25 MS. YOUNG: Thank you.

1 MS. DEBRA LYNN BROWN: My name is Debra Lynn
2 Brown, D-E-B-R-A L-Y-N-N, Brown, common
3 spelling.

4 I would like to ask for an accommodation of
5 an extra couple of minutes of time, if I could,
6 please. I can't talk as fast as I used to or as
7 quick, and being nervous doesn't help me, while I
8 get through as fast as I can.

9 The meat of the matter, I know politics are
10 involved here, and I don't have the money to hire
11 big law firms or do a political poll to get
12 government officials here, but I will use what's
13 left of my one small voice on behalf of the
14 manatee.

15 I have been a volunteer for Save the Manatee
16 Club for over 15 -- or, over 25 years. I think
17 you've gone too far this time by trying to
18 downlist the entire species from endangered to
19 threatened right now.

20 What I propose, as an alternative, that you
21 wait until 2020 for your final decision, until
22 some of the prior questions that have been
23 proposed can finally be somewhat answered. This
24 gives you four more years to make a reliable
25 assessment, and a lot can happen in four years,

1 as we've seen already.

2 Although you say protections for manatees
3 won't change, yet it's a matter of public
4 perception if manatees are downlisted. The
5 vultures in Florida have already begun circling
6 to try and get slow speed zones reduced or
7 eliminated. I'm sure that once any of those
8 start to get approved, the rest of the
9 regulations will fall like dominoes.

10 As an example, it's kind of been mentioned,
11 Brevard County meets each month on the mortality
12 statistics. The Brevard County Commissioner Curt
13 Smith, it's already been reported he's fishing
14 for relaxed regulations prior to your final
15 ruling. He -- he calls them archaic. Our
16 protections for manatees in the past could be
17 gone with the flick of a pen.

18 For one of the most (unintelligible) that we
19 have, it's the importance of (unintelligible).
20 Those are the two (unintelligible). They never
21 had an opportunity to produce any viable
22 offspring.

23 In the data we get from 2000 to 2009, the
24 statistics report the loss of 749. That's 10
25 years' worth. Since 2010 we've lost another 563.

1 That's a chunk of the next generation. Among
2 those, we know that a high percentage of females
3 are lost. That will have a major impact on the
4 future of manatee reproduction. I understand
5 that a sexually mature female in the wild could
6 conceivably bear 14 calves during her lifetime,
7 but realistically may only have 5 or 6 living
8 calves, if it's a good life.

9 A very small group of folks in Crystal River
10 and their high-powered legal vetoes are
11 challenging you to downlist the manatee for their
12 own selfish purposes, and their actions are
13 affecting Florida and a lot of other states and
14 countries like Belize. Those people don't like
15 the government overreach. I don't like how our
16 government is going to turn our award-winning
17 state parks into cattle ranches and golf courses
18 either, also how it's completely disregarding
19 climate change to the point of requiring its
20 employees not to even use the term anymore.

21 Our legislators are totality ignoring the
22 intent of Amendment One, it's what we voted for
23 funding conservation, and there are dissidents
24 appropriating this fund to their own purposes.
25 Now that's what I call government overreach. How

1 is this going to affect the manatee population in
2 the future?

3 So I'm only asking for four more years, just
4 to see how things are going. It's not long to
5 determine the fate of a species. Thank you.

6 MS. YOUNG: Thank you.

7 Kate MacFall and Lisa Fishman -- Melissa
8 Fishman.

9 MS. KATE McFALL: Hi. Kate MacFall
10 representing the Humane Society of the United
11 States. We believe the proposal to change the
12 status of manatees from endangered to threatened
13 is premature. And I will also submit written
14 comments during the comment period. I just want
15 to offer a few points now.

16 The agency's proposals were based on data
17 from 2011 and 2012. It's outdated and not
18 reliable science.

19 According to the Wildlife Research
20 Institute, in 2013 alone the state record of
21 killed manatees was around 16 percent of the
22 entire state's estimated population at that time,
23 yet none of this information was considered in
24 the Service's outdated analysis.

25 Additionally, we are concerned that even

1 though the 2012 analysis, which predated recent
2 die-offs, the Service stipulated manatees in the
3 southwest and northeast regions of the state will
4 show what the Service characterizes as a
5 long-term decline as a result of the loss of
6 major power plants. Up to 60 -- 60 percent of
7 the state's population would be affected. It
8 seems counterintuitive to downlist a species
9 while projecting the likelihood of long-term
10 declines.

11 In the January 6th press release the Service
12 stated that the proposal to downlist manatees
13 would not affect the federal protections
14 currently afforded by the ESA, which seems
15 somewhat disingenuous. Many area-specific
16 protections, including the speed limits and
17 zoning regulations, are enacted by state and
18 local ordinances, and these local protections can
19 easily be changed if their listing status
20 changes.

21 In fact, just a few days after the Service
22 announced the proposal, Brevard County
23 commissioners approved a regulation calling for a
24 review of the speed restrictions to see if they
25 have been effective or should be continued.

1 With a thousand people moving to Florida a
2 day, the human population is moving, development
3 and boating are on the rise. Policy leaders on
4 the county and state level are also being
5 approached for the removal of manatee
6 protections. This is a reality that should not
7 be ignored. Again, we will submit some written
8 comments in the near future. Thank you.

9 MS. YOUNG: Thank you.

10 MS. MELISSA FISHMAN: Hi. My name is
11 Melissa Fishman, F-I-S-H-M-A-N. Just a quick
12 question on the record in regards to your
13 worst-case scenario that you represented, and
14 that's assuming that all the current protections
15 currently remain in place. And I live in Brevard
16 County and I know that the commissioners are
17 looking to remove the speed zones there, so I was
18 curious. How would you enforce or guarantee that
19 those protections would stay in place if you
20 downlist the manatees?

21 The first time I saw a manatee, I was in
22 complete and total awe. They are completely --
23 they're amazing. I saw them in biology books but
24 never in person. Today the manatees are over --
25 are around 6,000 in population, and many who --

1 many who are against the manatees see this as a
2 perfect opportunity to advocate their
3 downlisting. What a horrible tragedy this would
4 be. In 2010 alone a cold snap caused over 1,700
5 deaths and in 2013 another 800 from red tide, and
6 these are just two of the many threats that
7 manatees face. Watercraft harassment, pollution,
8 entanglement, poaching, habitat loss, all of
9 these threats have one thing in common: Humans.
10 They're all due to human activities.

11 I believe it is our ethical responsibility
12 and moral responsibility to ensure the survival
13 of the manatees, not just for the manatees but
14 for the future generations so that they can enjoy
15 them like we have.

16 What -- what a horrible slap in the face
17 this would also be not just to the manatees but
18 all the amazing volunteers that have devoted
19 countless hours and time to save our beautiful
20 manatees and we need to remember it's the
21 manatees' home first. It's not our home. It's
22 their home. Thank you.

23 MS. YOUNG: Thank you.

24 Laressa Nelson. Cheyenne Canon.

25 MS. LAURESSA NELSON: Good afternoon. My

1 name is Laressa, L-A-U-R-E-S-S-A, Nelson,
2 N-E-L-S-O-N. I'm a second-generation Florida
3 native and I've been involved with
4 environmental -- just interested in our
5 environment my entire life. As a kid my dad took
6 me out to the woods on a regular basis, which was
7 Orlando, and there's very little of it left.
8 As -- as it is now, all around me I see
9 development, and we know that's not going to
10 stop.

11 So first, thank you for your service, and
12 you're the only thing really standing between us
13 and complete obliteration of the natural
14 environment here, in my opinion, while you and
15 all the activists that have taken time out of
16 their day to come and talk and do research and
17 work hard to protect the environment, to protect
18 animals that are voiceless.

19 My concern, as others have basically stated
20 in many ways, is an underestimation of risks in
21 the model, and I think we need more time to look
22 at those risks, to make sure that the model is
23 really including the most recent data and also
24 all of the risks that we are looking up here at.
25 As has been stated, there are just an increasing

1 amount of unprecedented changes in our
2 environment due to global warming, due to
3 population increases.

4 You guys are the experts. I don't need to
5 tell you that. But when the Service is shifting
6 the status, we are sending a message to the
7 public, to our politicians and our developers.
8 We are sending a message. I know a definition,
9 is the definition, but we really have to look at
10 are we really ready to look and say that -- that
11 we can truly downgrade.

12 This message is important. What people hear
13 and think about is, it -- it means a lot. They
14 don't necessarily know the science. They just
15 assume things.

16 Also, I just would like to know what it
17 would take to change the status back if we
18 realize that maybe this was an underestimation of
19 the risks. So once we downgrade, how long would
20 it take to get back to endangered. So that is a
21 big concern to me as well. Thank you.

22 MS. YOUNG: Thank you.

23 MS. CHEYENNE CANON: Hi. My name is
24 Cheyenne Canon, C-H-E-Y-E-N-N-E C-A-N-O-N. I'm
25 a Florida native. I have a degree in

1 environmental studies. People who have come
2 before me have pretty much accurately summarized,
3 I think, why the manatee should not be
4 downlisted.

5 However, I did want to say one thing, that
6 despite successful efforts to restore the
7 population, manatees still face threats on all
8 sides, even with endangered species -- endangered
9 status, so many threats that they qualify for all
10 five criteria upon which the FWS determined the
11 species to be endangered.

12 Downlisting the manatee will not reduce
13 those threats but increase their likelihood.
14 They rely on legal protections the endangered
15 status provides for them until these threats can
16 reasonably be reduced.

17 Manatees are a functional part of our
18 ecosystem, a system on which we depend, no matter
19 how much -- how separated we may feel from it.
20 Manatees are not fast, aggressive, or predatory.
21 They are innocent bystanders with no defense
22 against reckless, incorrigible human behavior.

23 Not only do they need our protection. They
24 deserve our protection. We put their lives at
25 risk every day. They are as unknowing and naive

1 as newborn babies. It's our responsibility to
2 protect them as vigorous as possible so that they
3 can continue to be a productive part of Florida's
4 ecosystem. Thank you.

5 MS. YOUNG: Thank you.

6 Heather Murphy. Andrea Bosiger.

7 MS. HEATHER MURPHY: Hi, my name is Heather
8 Murphy. I am a Florida native and a Save the
9 Manatee Club volunteer. I feel that manatees are
10 a vulnerable species by nature with their large
11 size and their thin skin. While we're all
12 celebrating their increased number, I feel it's
13 due to the current protections that they have now
14 that their numbers have increased.

15 I can't help but think that the red tide
16 event in 2013 that took over 800 manatees, quite
17 a large population -- a percentage of the
18 population at that time, and from what I
19 understand, that's not being considered in your
20 data.

21 Our waterways are dying with fertilizer
22 runoff and pollution. A second event is
23 certainly going to happen again. It's just a
24 matter of when. I voted for all who did not
25 campaign to increase the speed zones, yet manatee

1 mothers continue to be separated from their
2 calves and blocked from eating -- from their food
3 sources because of people being in their way.

4 Climate change has also caused the manatees
5 to enter into previously undiscovered habitat.
6 They, going to stones, none of them shows up
7 whenever I came close or else -- and having
8 problems with that. So that's another thing to
9 verify, of course, with an opportunity to
10 continue as well. So I feel that the downlisting
11 is premature and I stand by the stance of the
12 Save the Manatee Club. Thank you.

13 MS. YOUNG: Thank you.

14 MS. ANDREA BOSIGER: Hi there. I'm Andrea
15 Bosiger, B-O-S-I-G-E-R, and I think manatees face
16 too many perils to be downlisted, like boat
17 strikes and red tide, and I stand with the Save
18 the Manatees' Club position that the manatee will
19 fully mature and get on with it. Thank you.

20 MS. YOUNG: Thank you.

21 Lisa Moore. Mina Reale.

22 MS. LISA MOORE: Hi. My name is Lisa Moore,
23 M-O-O-R-E. I'm a fourth-generation Floridian.
24 I'm a 50-year resident of Crystal River. My
25 children and grandchildren live there, and Citrus

1 County was the first county in the state to
2 establish a manatee protection plan. We do love
3 the manatees in Citrus County and we do protect
4 them very well.

5 It's been 45 years since the manatee was
6 added to the endangered species list, billions in
7 in tax payer research and a billion dollars will
8 be spent in countless manhours in order to rescue
9 manatees on the brink of extinction over an
10 extended period of time.

11 (Unintelligible) generous donations
12 dedicated to scientific study. And I want to
13 make it abundantly clear when we have an increase
14 in the West Indian manatee population from an
15 estimated 1,300 in 1991 to more than 6,000 in
16 2015 that the species can no longer be considered
17 to be in danger of extinction in all or a
18 significant part of this geographic range.

19 Incredibly, the number of manatees counted
20 in Florida alone for 2015, 6,063, more than 3,246
21 more manatees than were counted in 2007.

22 The U.S. Fish and Wildlife Service and the
23 Florida Fish and Wildlife Conservation Commission
24 both recommended reclassifying the manatee from
25 endangered to threatened status. So I would

1 commend all of those agencies and the
2 collaborative efforts of the conservation groups
3 and the individuals that have helped to make this
4 a possibility. They deserve to be congratulated.

5 The goal is to remove the species from the
6 list of federal endangered and threatened
7 species. It was never the intention of the ESA
8 for a species to be permanently listed if the
9 biological reviews indicate that the species has
10 recovered.

11 The resources, both financial and manpower,
12 should be devoted to those species who are in
13 danger of extinction, not a species that is
14 thriving in its environment and does not meet the
15 the federally stipulated criteria.

16 I only have a little bit of time left, so I
17 do want to mention that Save Crystal River never
18 asked for all federal or state protections for
19 the manatee to be removed. That's not true. We
20 are a group that is composed of retirees,
21 teachers, working class people, and we are
22 committed to our community. We are planting
23 grass right now to try to restore the habitat for
24 the manatee in Kings Bay. Thank you.

25 MS. YOUNG: Thank you.

1 MS. MINA REALE: Hi, good afternoon, and
2 thank you very much for being here. My name is
3 Mina Reale, that's M as in Michael-I-N-A
4 R-E-A-L-E.

5 All right. I have a couple points that I'd
6 like to bring up, but I'd like to thank all the
7 people for their wonderful scientific background.

8 For previous animals which have been
9 downlisted, such as the peregrine falcon, because
10 DT -- DDT was removed from the environment --
11 what is being eliminated to help the manatees?
12 Are we eliminating boaters? Are we eliminating
13 people who live next to waterways? Are we
14 eliminating other encroachments on their
15 habitats? How are we going to help the manatee
16 more now that they're going to be threatened?

17 Also, manatees have been listed as
18 endangered for 50 years almost. Things have
19 gotten better in some ways in 50 years. I love
20 my cell phone; my car is safer; my health and
21 nutrition is better most days; but, what has not
22 improved is the pollution and the population. So
23 things that way is -- they're only getting worse
24 for the manatee.

25 I feel that you are molding the definition

1 to feet -- to fit certain needs or certain group
2 needs. What does threatened mean? What does
3 endangered mean? And that's what people have
4 said, if you're not going to change anything,
5 then why change it, why are we here freezing in
6 this chilly room.

7 I am a volunteer for the Save the Manatee
8 Club and I live in Orlando, but I am born and
9 raised in California. And an interesting trivia
10 is, on the California state flag is the
11 California Grizzly, which is now extinct. So is
12 that what's going to be happening to the manatee,
13 an animal that we hold as an icon, but we will
14 just look at them as a threatened or extinct
15 species; is that what we're looking for? Thank
16 you so much.

17 MS. YOUNG: Thank you.

18 Leslie Goodrich Bryant and Cora Berchem.

19 MS. LESLIE GOODRICH BRYANT: Hi. Leslie
20 Goodrich Bryant. Only a concerted effort to
21 protect the manatee in their habitat will save
22 manatees from extinction. As everyone else here
23 has said, from 2010 to 2015, 3,217 manatee died
24 in Florida waters, which is 53 percent of the
25 highest minimum population ever recorded, 6,063

1 in 2015. These are not sustainable levels of
2 mortality. Downlisting the manatee is premature
3 and counterproductive to manatee survival.

4 In response to 816, the model used by the
5 Service predicts that it is unlikely that the
6 southeastern U.S. population will fall below
7 4,000 in total individuals over the next 100
8 years, assuming -- and we know about assuming --
9 current threats will remain constant
10 indefinitely.

11 It is not logical to assume such a thing.
12 Why would you assume the threats will not
13 continue to rise as they have?

14 Enforcement of the environmental laws in
15 Florida has been reduced in recent years and
16 development is once again on the rise. The
17 spee -- the -- excuse me -- the Species Federal
18 Recovery Plan is outdated and the recovery team
19 was disbanded. Instead of focusing on
20 downlisting the manatees, the Service needs to
21 get the recovery team back to work and update the
22 recovery plan for the future.

23 The Service should not move forward with
24 downlisting the Florida manatee without a proven,
25 viable plan for reducing further -- oh, excuse

1 me -- for further reducing mortality and
2 preserving viable warm water habitat and
3 establishing recovery benchmarks in an updated
4 recovery plan.

5 The facts do not carry out the claim that
6 the manatees are doing well and no longer need
7 our protection. Thank you.

8 MS. YOUNG: Thank you.

9 MS. CORA BERCHEM: Hi. My name is Cora
10 Berchem, B-E-R-C-H-E-M. I am here today for the
11 manatees, who cannot come up out of the water and
12 actually come here to present themselves.

13 When I decided to start working with
14 manatees, a good friend of mine, who was already
15 working with them, had told me that there might
16 not -- may not be any left. There was in 2013,
17 the biggest red tide outbreak in history, a
18 massive mortality event that, candidly, the
19 Service is not considering in their analysis
20 right now.

21 I'll never forget that the victims my friend
22 held at the time did not recover. I hope that
23 not a lot of people here in this room have seen
24 the same horrifying pictures of cut up manatees
25 that I have seen.

1 The numbers have certainly increased, but
2 there's just no secure future. We don't even
3 know what a sustainable population would look
4 like. 6,000? 10,000? 100,000? No one knows
5 the answer to that.

6 The first couple of weeks of 2016 have
7 already seen a large number of fatalities, 75
8 total and 16 of them watercraft. The fatalities
9 have included a pregnant manatee with twins.
10 Does everyone know -- even know how rare this is?
11 Both twins were females, too. The cause of
12 death, watercraft.

13 Just two weeks ago I was able to help
14 release manatees at the power plant. We actually
15 had to postpone the release because of
16 (unintelligible) in the area. I saw hundreds of
17 manatees congregating at the power plant that
18 day. What if that power plant shuts down?
19 There's no plan on how to relocate those
20 manatees, no contingency plan. I, therefore, ask
21 today to finish the job, secure the manatees'
22 future, and then we can celebrate. Thank you.

23 MS. YOUNG: Thank you.

24 Jim Kalvin and Lee Day.

25 MR. JIM KALVIN: Thank you. My name is Jim

1 Kalvin, with a K, K-A-L-V-I-N. I appreciate you
2 all having us here. I thank you for this effort
3 to look at the pure science of the issue and try
4 to read through the emotional rhetoric, which
5 we've had a lot of today. I am a Florida native.
6 I'm a former U.S. Coastguard-licensed 100-ton
7 master delivery captain. I've been on every
8 intercoastal waterway in the state of Florida my
9 last working year.

10 I'm a diver, a sailor, a camper, and I'm a
11 fisherman. Suffice it to say, I don't consider
12 myself to stay as far as I possibly can
13 (unintelligible) to stand and watch.

14 Had an epiphany today. After years of the
15 Save the Manatee Club denying it, they're
16 pursuing a growth control program, heard nothing
17 but growth control proposals. It's when you
18 don't have understanding from the public on laws
19 that are generated as growth control being
20 crammed into a resource management regulatory
21 program, you're not going to get compliance.

22 Everybody knows that in the last 30 years
23 our manatee regs were a growth control
24 initiative. We asked a decade ago all boaters in
25 the state for carrying capacity studies. We

1 asked a decade ago for seagrass funds. We asked
2 a decade ago for the thermal pollution, which
3 everybody wants to continue.

4 The environmentalists want to continue
5 thermal pollution. What's it doing to the rest
6 of our ecosystem? What's it doing to the fish
7 nurseries? These animals eat 150 tons -- or, 150
8 pounds of seagrass per day. I have a deep
9 affinity for manatees also, but I also have a
10 deep affinity for everything else in our
11 estuaries being eaten out of house and home.

12 In capacity studies, the manatees have done
13 nothing but grow in number. Their range has
14 expanded exponentially. They're now eating off
15 seagrasses in areas where they've never been
16 before, and without the relisting of the animal,
17 we'll never be able to study those other effects.

18 We have to see the cumulative effect of an
19 ever-expanding population of giant herbivores on
20 our complete coastal ecosystem, and without that
21 we will be back here in five years with a total
22 environmental collapse. So thank you for your
23 efforts, and we'll help you any way we can.

24 MS. YOUNG: Thank you.

25 MS. MIMI LEGGETT: Good afternoon, ladies

1 and gentlemen. My name is Mimi, M-I-M-I,
2 Leggett, L-E-G-G-E-T-T, and I live in Ocala,
3 Florida. I'm nobody important, but I am a member
4 of the Manatee Support Center. I am speaking on
5 behalf of the manatees because they cannot speak
6 for themselves. I would ask that the U.S. Fish
7 and Wildlife Service not to downlist manatees
8 from the endangered species list but to keep
9 current protective measures in place. The speed
10 zones are especially important and must be kept
11 in place to prevent manatees from being injured
12 or killed by speeding boats and their propellers.

13 The FWS has great educational videos for the
14 public to enjoy and learn about and also protect
15 the manatee, approaching 50 years now, for which
16 we thank you. Manatees are Florida natives.
17 They are a unique species and an integral part of
18 our wildlife. These gentle giants are vegetarian
19 and are not predators. They are a great tourist
20 attraction, adding, I am sure, significantly to
21 the economy.

22 My husband, Richard, and I visited Homosassa
23 Springs with some friends and their children some
24 years ago and saw manatees for the first time.
25 It was a wonderful experience seeing the mothers

1 and babies so close to us. The children also
2 enjoyed learning about them, and we spent a
3 delightful day. That is another reason not to
4 downlist them, so future generations can enjoy
5 the same things we do -- the same things we do
6 and the beauty of being safe but close to
7 wildlife and these unique creatures.

8 There are some nice places to see manatees
9 such as Crystal River, Blue Springs State Park,
10 Merritt Island (unintelligible), Lee County
11 Manatee Park in Fort Myers next to Florida Power
12 and Light. When power plants shut down, manatees
13 suffer. They need warm water space to go to
14 where they can be safe. They have to contend
15 with loss of habitat, boat traffic, and algae
16 poisoning among other things. Let there be a
17 places they can rest, take a nap, and at least be
18 safe.

19 I would ask again the U.S. Fish and Wildlife
20 Service not to downlist manatees from the
21 endangered species list but to leave current
22 protective measures such as speed zones, refuges,
23 and factors in place to keep the population safer
24 and even better for other future generations.

25 Thank you very much.

1 MS. YOUNG: Thank you.

2 Steven Webster. Anne Marie Cancio.

3 MR. STEVEN WEBSTER: Hi. Steven Webster
4 like the dictionary, from Monticello, Florida,
5 I'm past present of Citizens for Flora and Fauna.
6 I know I can't ask you a question, but I can ask
7 these folks a question.

8 How many of you here know whether or not
9 speed zones are effective, whether or not they
10 work? I can see a show of hands.

11 Actually, I think, as we all know, Jim, you
12 mentioned three reasons why they should work, but
13 in fact, we all know there's never been any real
14 study on whether or not they do.

15 We don't know. You guys with the FWS have
16 speed zones in -- on canals and large channels
17 and residential canals. You have them in waters
18 that are 65 foot deep, so deep that even you
19 didn't know how to sign it. Your state
20 counterparts have it in waters -- in waters so
21 shallow, sometimes it's above the water, in other
22 words, land and other places -- on the bottom, a
23 straight line in other places where the shallow
24 follows the shoreline contour, and just recently
25 your state counterparts proposed boating speed

1 zones in the water sports area that 52 area
2 surveys have counted zero manatees. Fifty-two
3 have no manatees.

4 So I think we can conclude from this that
5 not all speed zones work as effective as some
6 others do. Some may not help at all. And it
7 would seem if we are going to concentrate on
8 effective protection of manatees, then we really
9 should be looking and evaluating whether or not
10 speed zones are a good form of protection and
11 where they are -- and believe me, everybody, we
12 all know that speed zones work in some places and
13 don't work in others. But where they do work,
14 let's put them in those places and enforce them
15 adequately.

16 We've heard a lot of people here today talk
17 about removing protections as being a bad thing.
18 Quite the opposite. What we're saying is, let's
19 find out what effective protection is and let's
20 do the best job we can with that. Manatees
21 deserve it. We all deserve it, what we're trying
22 to do. Thank you.

23 MS. ANNE MARIE CANCIO: Good afternoon. My
24 name is Anne Marie Cancio, A-N-N-E M-A-R-I-E
25 C-A-N-C-I-O. I am here as not a scientist but as

1 a mother, as a wife, and a humanitarian and a
2 great lover of animals as well as human life.
3 I've been a little bit humbled to hear all of
4 these individuals that are volunteers and experts
5 in the area of manatee ecology, and I am not, nor
6 do I pretend to be. However, I did want to show
7 up today. I came from Tampa, Florida, just to
8 advocate on behalf of the manatees.

9 I do urge the Service to base its decision
10 on whether to downlist the manatee on the best
11 available scientific information; but, regardless
12 of their decision, I wanted to just show up and
13 make a special plea to the individuals in this
14 room, the Service, to please treat manatees that
15 live near them with compassion and kindness and
16 respect, and these measure -- measures we all
17 must -- when we adhere -- adhering to the reduced
18 boat speeds and allowing for the access to warm
19 water refugees -- refuges -- I'm sorry -- and
20 sanctuaries. So anyway, that's all I have to
21 say, and I appreciate your time. Thank you.

22 MS. YOUNG: Thank you.

23 Bob Atkins. Barbara Napoles.

24 MR. BOB ATKINS: My name is Bob Atkins,
25 A-T-K-I-N-S. I am the current president and the

1 founder of Citizens for Florida's Waterways, an
2 international organization in 1994.

3 I'm also a former professor of mathematics,
4 and I spent 30 years managing risk as a senior
5 manager for the detachable tank on the space
6 shuttle.

7 I know when risk management fails, I know
8 how risk management works, but the point is,
9 there is no risk management that has to take
10 place. What we've been doing for the last 30
11 years, we have been managing the risk of
12 watercraft mortality, which is this little line
13 down here, and that risk doesn't exist.

14 We've also been managing the risk of
15 extinction, that which doesn't exist. The risk
16 that doesn't exist is the risk of what happens as
17 we continue to increase our population of the
18 manatee with a fixed number of -- fixed amount of
19 seagrass.

20 We're still working on the premise of the
21 manatees' population that is warm-water limited.
22 Your best study recently says that the actual
23 manatee limitation is seagrass. So, in essence,
24 the manatee and its habitat kind of work against
25 each other in some ways. Now, that doesn't mean

1 that everywhere that's a problem, but we have
2 created some situations in some areas where
3 that's a problem. It does need to be managed.

4 One thing that Jim said, and we've said it
5 all along -- and I have -- I have a problem
6 because it's hard for me to get into the
7 emotional side of my brain because I'm a
8 mathematician, not a scientist, but I've heard a
9 lot of emotion, I've heard a lot of misuse of
10 data, and I'm glad none of these people are my
11 former students.

12 But the data is what the data is, and -- and
13 it's very clear. We've operated since the '70s
14 by collecting dead animals, and that's all we do.
15 We had a couple of slides back in there where we
16 thought we knew what the population was.

17 We saw that the number of dead animals
18 increased and then -- and then got us into crisis
19 mode. We went into a mode where we did
20 everything since then on three basic assumptions.
21 The first assumption was that we were in dire
22 straits, the manatee was going to be immediately
23 extinct.

24 The second thing is, the only thing we could
25 do to fix that was to limit boating.

1 And the third one is, that the only way to
2 limit the boating is to travel at a slow speed.
3 And all three of those are based on assumption,
4 not fact, and we need to go look at the facts.

5 MS. YOUNG: Thank you.

6 MS. BARBARA NAPOLES: Good afternoon. My
7 name is Barbara Napoles. That's B-A-R-B-A-R-A.
8 My last name is spelled N-A-P-O-L-E-S. I'm
9 coming here today to be in front of you as a
10 resident of Citrus County, and I live close to
11 Three Sisters Spring, Kings Bay, Homosassa, and
12 Crystal River. I kayak in these areas
13 constantly, and I enjoy, completely enjoy, the
14 fact that I am able to see manatees grazing. And
15 I am also seeing a lot of harassment of them
16 being done by some of the tourists, and I think
17 that if you do delist the manatees, what's going
18 to happen to them?

19 I've seen boats striking them. I've seen
20 jet skiers going crazy. I think if you do delist
21 them, I think you should also straighten the
22 speed laws in Kings Bay and in Crystal River and
23 in the Homosassa River.

24 I'll be submitting my -- my comments
25 electronically. I'm sorry, but I forgot my notes

1 in my rush to get here, to be here on time, and I
2 thank you for allowing us, and please do listen
3 to all of those that have been in front of me.
4 Listen to them and, please, do not delist them.
5 Thank you.

6 MS. YOUNG: Thank you.

7 Adam Pollock. Mary Lyons.

8 MR. ADAM POLLOCK: Good afternoon. My name
9 is Adam Pollock. (Unintelligible.) as an avid
10 boater, powerboater, and powerboat instructor,
11 I've had plenty of first chances to see manatees,
12 and it has been amazing to be near.

13 It's kind of interesting, but I've, you
14 know, found something very unfortunate. I have
15 yet to see an adult manatee without obviously
16 significant scars. You get near them, they all
17 have scars from boating.

18 One of the things I found kind of
19 interesting in some of the comments here, most of
20 the comments here today have been in favor of
21 keeping the manatee on the endangered list. I've
22 been kind of surprised on the undertones of the
23 people who have mentioned not to do that, you
24 know, against that, and most of them have kind of
25 ran with the idea that we really have an

1 overpopulation of manatees and almost the
2 undertone that there's too many of them. Seems a
3 little odd, especially when we're talking about
4 an endangered species.

5 We've had a lot of people talk here today, a
6 lot of compelling information. I think it's
7 pretty clear that if the status is downgraded,
8 it's going to kind of continue in a downward
9 spiral for the manatees, understanding that
10 large-scale changes take place in these states.
11 going to be steps if we get on the right
12 perspective, that's going to be a step in the
13 wrong direction, an opening for impacts into our
14 state's ecology and also considering that a lot
15 of the scars are caused from boating.

16 Okay, if we reduce the speeds, then what are
17 we going to do? One solution would be guards for
18 the props on boats, but we don't hear anybody
19 talking about doing anything like that. There
20 should be some more information on that, putting
21 prop guards on boats. Thank you.

22 MS. YOUNG: Thank you.

23 Mary and William Lyons are on the same card.
24 I called Mary Lyons. I did not get an
25 appearance. What about William Lyons?

1 UNIDENTIFIED FEMALE: They've left the room.

2 MS. YOUNG: Okay. Thank you.

3 Mimi Leggett and Stephanie Somerset.

4 I guess Mimi Leggett has already spoken.

5 Stephanie Somerset. Dagmar Gatell.

6 MS. STEPHANIE SOMERSET: Good afternoon.

7 I'm Stephanie Somerset, and thank you so much for
8 taking time to be here today.

9 I'm a Florida native, an avid boater, sail
10 and power. I've lived in Florida all of my life
11 and enjoyed the great outdoors. I'm also an
12 animal lover, huge animal lover, especially one
13 of the Florida manatee.

14 I'm also a 100-ton Coast Guard Captain, and
15 I have founded the organization north of here to
16 protect boaters' access to our waterways, and the
17 reason we had to do that is because there are --
18 there were a group of shore bird enthusiasts who
19 felt that we could not coexist with the shore
20 birds, even though they've done so for
21 generations.

22 And we what we found is that as once we
23 tried to discuss it in terms of facts and figures
24 and science, it was -- it all came down to
25 emotion, and the entire reaction to us being out

1 there with the shore birds was to restrict,
2 restrict, restrict our access.

3 And what I believe is that, as a society, we
4 have to organize ourselves and run our fears
5 based on facts and science, and you guys have
6 shown what an incredible success story we have
7 here, how you've brought the manatee back from
8 the brink, and I think there should be a bit of a
9 more celebratory feeling in this room right now,
10 and I congratulate you guys and all these
11 passionate people here who have come to talk to
12 you.

13 However, the facts are there, and if you
14 don't follow the process, the process is broken.
15 So I would say follow the process. Reclassify
16 the manatee. And I know that you and all of
17 these passionate people will continue to protect
18 it and balance the access of Florida citizens and
19 people who enjoy the great outdoors, like we do
20 with also our Florida manatee. Thank you.

21 MS. YOUNG: Thank you.

22 MS. DAGMAR GATELL: Hello. My name is
23 Dagmar Gatell, D-A-G-M-A-R G-A-T-E-L-L. In
24 live in a neighboring county. I'm originally from
25 Germany and I came to Florida as a tourist in '93

1 and then moved to Florida in 2005.

2 For me, what I can see from an outside
3 perspective, people see the manatee as something
4 that is so unique to Florida that they can get
5 caught up. So for me it's not showing a future,
6 but just a (unintelligible) -- it's how the world
7 sees Florida, and people come for Disney World,
8 people come for the manatee.

9 What I hear here today is much more about
10 problems, and it's not a manatee problem. In my
11 opinion and what I ask for is that the manatee
12 stays endangered but that the problems are taken
13 care of. If the problem is that the manatees eat
14 too much seagrass, the manatees take up habitats
15 from other areas, then the people want to know
16 that the manatee needs to be protected to live,
17 then I suggest there should be a bigger group of
18 people, professionals and the government and
19 volunteer organizations, sitting together and
20 finding a solution for it.

21 So I propose to put the endangered on the
22 manatees, keep it on the manatees, to preserve
23 the life it, but find -- find solutions for
24 Florida where people can -- all people can enjoy
25 the outdoors and wildlife. Why do we have to

1 give up something? It doesn't make anything
2 better by taking the manatees off endangered.
3 Then what do we win with that, nothing.

4 So I want to have a result. I want to have
5 a great result for all Florida wildlife and
6 Florida residents and for the tourists coming in.
7 We have so much to offer. We should be proud of
8 where we are and what we've accomplished and not
9 taking this down and minimizing it because
10 Florida is the only state where it has the
11 manatees.

12 So we -- and has the whole -- like we --
13 we -- it's an asset of us and we should make the
14 best out of our assets and not discussing them
15 and saying negative points and, oh, Florida
16 thinks manatees aren't important, and we're now
17 taking them off of the endangered. It should be
18 the opposite and we should celebrate.

19 MS. YOUNG: Lisa Hurley and Angela Edbrooke.

20 MS. LISA HURLEY: Hello. My name is Lisa
21 Hurley. I'm just a private citizen. I live here
22 in Florida. I don't have a financial stake in
23 anything that's going on around here. I don't
24 have a boating interest. I'm not a captain, I
25 don't live on the ocean, but I do live here in

1 Florida. I've lived here for over 30 years.

2 I can agree with the fact that everyone here
3 wants to agree on the facts and science and not
4 make an emotional decision. I just have been
5 listening to the numbers, and I can't -- I can't
6 wrap my head around the fact that we're losing --
7 it's okay to lose on average 562 manatees a year;
8 but, I don't hear any figures that we're making
9 more than 562 manatees every year. So I see this
10 as a decline, and I just can't understand why you
11 would delist an animal when the species is -- is
12 declining.

13 Now, the model that they say that you are
14 using, and according to the information I've
15 received today -- this has been a very
16 educational afternoon for me -- says that the
17 model assumes that the current threats remain
18 constant.

19 Well, I just did a Google search, and
20 according to the Sun Sentinel, on October 20th,
21 2014, we're receiving over 700 people per day.
22 Now, that, to me as a layperson, implies that we
23 are receiving 700 threats to manatees every day.
24 How can your model say current threats remain
25 constant, and we receive 700 threats -- more

1 threats per manatees -- for -- for manatees every
2 day? How can your model be accurate at all?

3 The population you should be concerned with
4 is people, not manatees. The people are going to
5 kill everything in Florida unless we rein them
6 in. We have to rein them in and we have to help
7 the manatees. And if you don't count on the
8 number of people here, that's the biggest problem
9 we're facing. People are the problem. That's
10 all I have. Thanks.

11 MS. YOUNG: Thank you.

12 MS. ANGELA EDBROOKE: Hello. Thank you for
13 hearing me. My name is Angela Edbrooke, and it's
14 E-D-B-R-O-O-K-E. I don't have fancy numbers. I
15 don't have a lot of data to give you. I just
16 have a heartfelt message to please do not
17 downgrade the manatee. I am also a member of
18 Defenders of Wildlife. I am from the Tampa area.
19 I'm a teacher. I'm a mom of two girls. They're
20 13 and 16. I'm also just going to give you a
21 quick snapshot of my life. As a teacher, I speak
22 in bullet points, so this is no exception.

23 I'm a fifth-generation Floridian. I grew up
24 in Sarasota County, I grew up on the water in
25 Sarasota County and not once did I ever see a

1 manatee. I was born in 1970. So my first
2 manatee that I saw in the wild, I was 25 years
3 old. That says something. That says that the
4 good work that your organization is doing as well
5 as the organiza- -- the efforts of all of us here
6 and in previous generations has given me such a
7 great gift as to see a manatee in the wild.

8 Because of these wonderful efforts, my girls
9 have also been able to see a manatee in the wild,
10 and I am pleading with you not to take away that
11 gift from future generations.

12 Also, I believe that by downgrading, it's
13 only enhancing our image as the manatees' only
14 predator. We need to protect them and not -- and
15 not harm them. Thank you very much.

16 MS. YOUNG: Thank you. I have called all of
17 the names of the registered speakers. Is there
18 someone here tonight that wishes to register and
19 speak at this time?

20 AUDIENCE MEMBER: (Indicating.)

21 MS. YOUNG: You may register at the speaker
22 registration table.

23 (Brief pause.)

24 MS. YOUNG: Thank you. Michael Millsap.
25 Karen Freedman.

1 MR. MICHAEL MILLSAP: Yes. I'm Captain Mike
2 Millsap, it's M-I-L-L-S-A-P, and I've heard a lot
3 of gloom and doom here today --

4 THE REPORTER: I'm having trouble. Can you
5 move back from the microphone?

6 MR. MICHAEL MILLSAP: Okay. I've heard a
7 lot of gloom and doom here today from a lot of
8 folks, and manatees are still increasing, even
9 though they'll always -- out of everything that's
10 happened.

11 Now, I've owned a company for 17 years, and
12 I take people out to swim with manatees. When I
13 first started out, I had one boat. We'd go out
14 and find a few manatees, people would get in the
15 water. And now we go out, it's like we have 800
16 and some manatees in Crystal River, and we are
17 just overwhelmed with manatees. So I've seen the
18 change, literally, on -- as a captain on a boat
19 in the particular area of 600 acres of Crystal
20 River. So I believe we should.

21 I don't know nothing about the science. I
22 just know that when I move -- when I moved here
23 and started my company, there weren't that many
24 manatees. I've talked to some oldtimers from 50
25 years ago, and they'd very rarely seen a manatee

1 in Homosassa or Crystal River, and now we have --
2 I think our last count in Citrus County was over
3 a thousand.

4 So if they're not increasing and they're
5 threatened -- been doing this 17 years, the whole
6 time, when there were almost no manatees, and I
7 don't see -- I don't know nothing about the
8 science. I just know what I see. And as a boat
9 captain and a tour operator, that's what I see.
10 Thank you.

11 MS. YOUNG: Thank you.

12 MS. KAREN FREEDMAN: Hello. My name is
13 Karen Freedman, F-R-E-E-D-M-A-N. I'm a 35-year
14 resident of Florida, an environmental science
15 marine biologist, and I would like to speak today
16 to encourage you to embrace the cautionary
17 principle of wildlife management and protect the
18 manatee populations. I feel that downlisting is
19 premature, and I also agree that there should be
20 more public hearings located in the north and the
21 south parts of the state.

22 Due to the global climate change, we will
23 have more -- most likely have more extreme
24 weather events, including hurricanes and cold
25 snaps, and that's one reason I urge the

1 cautionary principle.

2 The other is that the manatee has a very
3 slow reproductive rate. They don't reach sexual
4 maturity until they're five years old, and they
5 only have five viable calves in a reproductive
6 lifetime. Calves stay dependent for two years,
7 and two to five -- I think two point five years,
8 and that's why they don't reproduce very quickly.

9 Also, nonlethal injuries due to mainly boat
10 scoring can reduce the breeding success of a
11 breeding female.

12 Then we have habitat fragmentation, where
13 populations can't get together, leads to
14 genetic -- a decrease in genetic veracity. We
15 have also had a reduced migrant pairing capacity
16 due to natural habitat degradation and loss. We
17 have the elevated nitrates, sand bacteria, and
18 decreasing -- thus decreasing seagrass. Boat
19 scarring decreases seagrass beds.

20 Also, there are newer shallow watercraft
21 boats that are allowing them to go into shallower
22 and shallower areas will do more harm to the
23 seagrass beds than boaters.

24 There's also increased turbidity, decreasing
25 the seagrasses. We've also had loss of warm

1 water habitats due to (unintelligible) and
2 naturally causes decreased natural warm water
3 springs are due to increased human population
4 causing a greater draw on the natural
5 groundwater, and on the loss of recharging areas
6 due to the habitat loss is debilitating, and it
7 will only get worse as the population increases
8 to the 26 million people by 2030.

9 And also, we're, you know, decommissioning
10 some of the power plants, which is an artificial
11 form of natural warm water for them.

12 So they have a decreased habitat, and it
13 will only get worse as our human population
14 increases.

15 Also, by having smaller areas where they're
16 able to congregate, that increases their chance
17 of disease, spreading infectious diseases.

18 Also, I just want to quickly mention
19 (unintelligible), who did the core biological
20 model. He also has admitted that he did not
21 include the 2010 and 2013 die-offs in his
22 nation -- initial assessment of population
23 viability.

24 And I thank you today and I encourage you to
25 please not declass the manatee to a threatened

1 species.

2 MS. YOUNG: Great. Thank you. Do we have
3 anyone else who wishes to register to speak?

4 (No response.)

5 MS. YOUNG: Being none, I would like to
6 thank you for coming out this evening. Your
7 participation is very much appreciated. It is
8 now approximately 5:19. This public hearing is
9 adjourned.

10 (The hearing adjourned at 5:19 p.m.)

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 CERTIFICATE OF REPORTER

2

3

STATE OF FLORIDA

4

COUNTY OF ORANGE

5

6

7

I, LISA K. WORKMAN, FPR, Court Reporter

8

and Notary Public, State of Florida, was

9

authorized to and did stenographically report the

10

foregoing proceedings; and that the transcript,

11

pages 3 through 106, is a true and accurate

12

record of my stenographic notes.

13

I further certify that I am not a

14

relative, or employee, or attorney, or counsel of

15

any of the parties' attorney or counsel connected

16

with the action, nor am I financially interested

17

in this action.

18

DATED this 5th day of March, 2016.

19

20

21

22



23

LISA K. WORKMAN, FPR
COURT REPORTER

24

25

Formal Public Hearing of United States Fish and Wildlife Service
 STATUS OF THE WEST INDIAN MANATEE, PROPOSED ACTION TO RECLASSIFY THE INDEX: 1,200..activities

1	<p>19 48:11</p> <p>1960s 13:8</p> <p>1967 10:13</p> <p>1970 10:13 101:1</p> <p>1991 50:4 76:15</p> <p>1994 90:2</p> <hr/> <p style="text-align: center;">2</p> <hr/> <p>2 7:22 15:16</p> <p>2,494 48:18</p> <p>2,822 44:24</p> <p>20 23:12 30:16 44:8 50:8</p> <p>200-year 29:25</p> <p>2000 65:23</p> <p>2005 97:1</p> <p>2007 63:11 76:21</p> <p>2008 32:2</p> <p>2009 26:16 65:23</p> <p>2010 40:8 43:8 50:11 51:9 65:25 70:4 79:23</p> <p>2011 21:9 67:17</p> <p>2012 63:11 67:17 68:1</p> <p>2013 21:8 26:17 43:10 63:12 67:20 70:5 74:16 81:16</p> <p>2014 48:8,10,12,16, 18,20,23 49:2,4 99:21</p> <p>2015 40:8 49:8,9 50:12 51:9 76:16,20 79:23 80:1</p> <p>2016 3:5 9:6 42:16 63:12 82:6</p> <p>2020 64:21</p> <p>2030 55:11</p> <p>20th 3:4 99:20</p> <p>23 32:1 33:11</p>	<p>25 48:5 64:16 101:2</p> <p>25-year 56:19</p> <p>26 55:11</p> <hr/> <p style="text-align: center;">3</p> <hr/> <p>3,217 40:8 50:10 79:23</p> <p>3,246 76:20</p> <p>3,270 51:9</p> <p>30 83:22 90:4,10 99:1</p> <p>32 30:4</p> <p>344,000 48:13</p> <p>35 63:14</p> <p>365 49:1</p> <p>3:04 3:4</p> <hr/> <p style="text-align: center;">4</p> <hr/> <p>4,000 52:23 80:7</p> <p>40,000 32:13</p> <p>400 23:10 26:18 32:13</p> <p>405 49:9</p> <p>43 63:13</p> <p>45 8:3 76:5</p> <hr/> <p style="text-align: center;">5</p> <hr/> <p>5 50:13 66:7</p> <p>50 30:24 46:12 78:18,19 85:15 102:24</p> <p>50-year 75:24</p> <p>500 26:13 31:23,24</p> <p>52 88:1</p> <p>53 50:12 79:24</p> <p>532 15:10</p> <p>562 99:7,9</p> <p>563 65:25</p>	6	A
<p>1,200 50:6</p> <p>1,300 76:15</p> <p>1,700 70:4</p> <p>1-800-275-7991 4:19</p> <p>1-in-1,500 48:25</p> <p>1-in-10 48:17</p> <p>1-in-12,000 49:5</p> <p>1-in-14 49:10</p> <p>1-in-2,400 49:3</p> <p>1-in-4 48:14</p> <p>1-in-625 48:20</p> <p>1/2 15:16</p> <p>1/3 26:11</p> <p>10 42:16 65:24</p> <p>10,000 82:4</p> <p>100 15:18 80:7</p> <p>100,000 82:4</p> <p>100-ton 83:6 95:14</p> <p>11 36:4</p> <p>12-month 24:25 53:12</p> <p>12-year 45:6</p> <p>12th 42:19</p> <p>13 100:20</p> <p>13,000 15:6</p> <p>14 66:6</p> <p>15 7:22 21:10 64:16</p> <p>15.6 48:10</p> <p>150 84:7</p> <p>150,000 48:16</p> <p>15th 42:20,21</p> <p>16 67:21 82:8 100:20</p> <p>161 31:24</p> <p>17 102:11</p>	<p>6 66:7</p> <p>6,000 23:5 26:10 27:9 49:9 69:25 76:15 82:4</p> <p>6,063 76:20 79:25</p> <p>6,315 50:7</p> <p>6,350 15:9 44:24</p> <p>60 49:8 68:6</p> <p>600 102:19</p> <p>634 48:23</p> <p>65 87:18</p> <p>6th 68:11</p> <hr/> <p style="text-align: center;">7</p> <hr/> <p>700 99:21,23,25</p> <p>70s 91:13</p> <p>73 49:4</p> <p>749 65:24</p> <p>75 82:7</p> <p>766 26:17 43:9</p> <p>7th 9:6</p> <hr/> <p style="text-align: center;">8</p> <hr/> <p>8 31:23</p> <p>800 63:12 70:5 74:16 102:15</p> <p>816 80:4</p> <p>830 26:16 43:11</p> <p>84 25:2 59:7</p> <p>899,000 48:22</p> <hr/> <p style="text-align: center;">9</p> <hr/> <p>93 96:25</p>	<p>A-n-n-e 88:24</p> <p>A-t-k-i-n-s 89:25</p> <p>abated 26:22</p> <p>aboard 36:4</p> <p>absolutely 58:5</p> <p>abstract 47:10</p> <p>abundantly 76:13</p> <p>access 13:12 61:1 89:18 95:16 96:2,18</p> <p>accidents 47:17 49:13</p> <p>accommodation 64:4</p> <p>accomplished 20:19 98:8</p> <p>accord 6:16 7:5</p> <p>accorded 6:18</p> <p>account 51:17 52:8 55:6,7 61:1,3</p> <p>accounting 50:21</p> <p>accurate 63:10,11 100:2</p> <p>accurately 73:2</p> <p>acknowledged 55:5</p> <p>acknowledges 53:12</p> <p>acres 32:13 102:19</p> <p>act 11:14 12:5 20:20 35:25 36:14 47:20 59:1,2</p> <p>action 3:6 4:23 17:7 33:4 62:11</p> <p>actions 6:22 34:3 66:12</p> <p>active 50:1</p> <p>activists 71:15</p> <p>activities 13:6 14:22 21:23 39:5 55:18 70:10</p>		

<p>activity 51:6 52:4 60:23</p> <p>actual 90:22</p> <p>Adam 93:7,8,9</p> <p>adapt 40:15</p> <p>add 16:11 23:16</p> <p>added 11:18 76:6</p> <p>adding 85:20</p> <p>additional 16:11 58:17</p> <p>Additionally 67:25</p> <p>address 4:24,25 14:16 43:24 52:22 60:15</p> <p>addressed 12:2 14:25 61:9</p> <p>addresses 9:9</p> <p>adequacy 59:25</p> <p>adequate 29:3 47:12</p> <p>adequately 7:19 23:8 52:22 88:15</p> <p>adhere 7:23 8:7 18:6 25:19 36:13 89:17</p> <p>adhering 89:17</p> <p>administrative 38:17</p> <p>admittedly 47:14</p> <p>adopted 10:18</p> <p>adult 60:16 93:15</p> <p>adversarial 7:4</p> <p>adversely 46:13</p> <p>advocate 70:2 89:8</p> <p>affect 60:16 67:1 68:13</p> <p>affected 68:7</p> <p>affecting 12:16 66:13</p> <p>affinity 56:20 84:9, 10</p> <p>afford 49:13</p>	<p>afforded 68:14</p> <p>afternoon 3:3 18:9 23:19 28:2 29:18 41:17 42:22 46:6 49:16 50:25 52:11 56:15 70:25 78:1 84:25 88:23 92:6 93:8 95:6 99:16</p> <p>agencies 41:6 77:1</p> <p>agency 21:25 34:3 36:19 38:25 53:3</p> <p>agency's 58:11 67:16</p> <p>aggressive 73:20</p> <p>agree 25:17 28:9 99:2,3</p> <p>agreed 41:10</p> <p>algae 46:5 52:2 62:9 86:15</p> <p>alive 49:11</p> <p>allegedly 31:22</p> <p>alligator 36:23</p> <p>alligators 19:1</p> <p>allocate 53:11</p> <p>allotted 3:19</p> <p>allowed 7:12 8:12 28:14</p> <p>allowing 18:10 89:18 93:2</p> <p>alternative 64:20</p> <p>altogether 47:7</p> <p>amazing 34:6 69:23 70:18 93:12</p> <p>Amazon 11:2</p> <p>Amendment 66:22</p> <p>America 10:10 11:4, 10 56:4,5</p> <p>American 36:22,23</p> <p>amount 50:7,10 58:3 62:4 72:1 90:18</p> <p>Amy 22:21,22</p> <p>analysis 12:8 15:19</p>	<p>21:2,9 22:11 31:17 32:5 59:14 67:24 68:1 81:19</p> <p>analyst 49:20</p> <p>analyze 28:7</p> <p>Andrea 74:6 75:14</p> <p>Angela 98:19 100:12,13</p> <p>animal 42:21 43:3 79:13 84:16 95:12 99:11</p> <p>animal's 58:9</p> <p>animal-related 57:9</p> <p>animals 14:5,19 27:21 49:23 54:10 56:20 57:1,12 58:1 62:1,13,20,21 71:18 78:8 84:7 89:2 91:14,17</p> <p>Ann 22:21 23:19,20 56:14 58:21</p> <p>Anne 87:2 88:23,24</p> <p>announced 68:22</p> <p>announcement 16:3 32:18</p> <p>announcing 4:23</p> <p>annoying 24:23</p> <p>annual 45:2</p> <p>anti-government 21:16</p> <p>anti-manatee 22:5</p> <p>anticipated 52:22 55:22</p> <p>Antillean 10:7 11:8 39:15 42:3</p> <p>Antilles 11:5,10</p> <p>anymore 66:20</p> <p>Apollo 61:16</p> <p>appalled 34:15</p> <p>apparent 12:19</p> <p>apparently 26:9</p>	<p>appearance 94:25</p> <p>appears 5:2</p> <p>apply 44:25</p> <p>approach 8:20,22 22:17 45:21</p> <p>approached 56:23 57:18 69:5</p> <p>approaching 85:15</p> <p>appropriating 66:24</p> <p>approved 25:24 65:8 68:23</p> <p>approximately 3:4 15:6 23:5 48:12</p> <p>April 9:6</p> <p>aquatic 37:10 38:3</p> <p>arbitrary 59:9</p> <p>archaic 65:15</p> <p>area 11:1 25:7 30:12 31:7 40:12 42:4,8 82:16 88:1 89:5 100:18 102:19</p> <p>area-specific 68:15</p> <p>areas 10:20,21 11:3 13:11 16:13 30:21 46:22 84:15 91:2 92:12 97:15</p> <p>Army 32:18</p> <p>arrive 40:25</p> <p>Arthur 43:21 46:6,7 54:16</p> <p>artificial 52:23 59:19</p> <p>ashamed 57:14</p> <p>aspects 7:1</p> <p>assert 59:9</p> <p>assessment 44:14 64:25</p> <p>assessments 38:9</p> <p>asset 98:13</p> <p>assets 98:14</p>	<p>assist 7:14 42:2</p> <p>assistance 37:22</p> <p>assume 35:17 72:15 80:11,12</p> <p>assumes 99:17</p> <p>assuming 69:14 80:8</p> <p>assumption 60:19 91:21 92:3</p> <p>assumptions 91:20</p> <p>assuredly 16:24</p> <p>Atkins 89:23,24</p> <p>Atlantic 45:15</p> <p>atmosphere 7:4</p> <p>attacking 19:24</p> <p>attorney 58:23</p> <p>attraction 85:20</p> <p>audience 6:2,14,23 7:5 101:20</p> <p>Audubon 18:13 31:10</p> <p>author 29:24</p> <p>automatic 7:24 18:7</p> <p>average 23:9 63:6 99:7</p> <p>avid 93:9 95:9</p> <p>award-winning 66:16</p> <p>aware 45:25</p> <p>awe 69:22</p> <hr/> <p style="text-align: center;">B</p> <hr/> <p>B-a-r-b-a-r-a 92:7</p> <p>B-e-r-c-h-e-m 81:10</p> <p>B-o-s-i-g-e-r 75:15</p> <p>B-r-o-w-n 48:1</p> <p>babies 74:1 86:1</p> <p>baby 42:19,22 56:23</p>
---	--	--	---	---

<p>back 13:8 35:11 42:11 46:5 47:21 50:9,15 56:24 57:16 72:17,20 80:21 84:21 91:15 96:7 102:5</p> <p>background 78:7</p> <p>backup 8:17,18,20 18:3</p> <p>backyard 42:25</p> <p>bad 20:25 43:7 88:17</p> <p>bag 38:4</p> <p>Bahamas 11:7</p> <p>balance 96:18</p> <p>Bald 36:22</p> <p>bandied 22:9</p> <p>Barbara 89:23 92:6, 7</p> <p>base 89:9</p> <p>based 15:19,20 24:14 27:6 36:15 44:2 47:15 51:11 60:9 61:9 67:16 92:3 96:5</p> <p>basic 91:20</p> <p>basically 23:22 71:19</p> <p>basing 48:5</p> <p>basis 45:11 71:6</p> <p>bay 10:25 32:13 34:14,17 37:8,15 39:3,6,8 77:24 92:11,22</p> <p>Beach 4:2 20:14 61:17</p> <p>bear 66:6</p> <p>beautiful 33:25 35:22 36:17 70:19</p> <p>beauty 86:6</p> <p>beds 31:5</p> <p>begin 8:21 21:2</p> <p>begun 65:5</p>	<p>behalf 33:24 64:13 85:5 89:8</p> <p>behavior 73:22</p> <p>beings 62:14</p> <p>Belize 66:14</p> <p>belong 49:21</p> <p>belongs 62:19</p> <p>beloved 37:6</p> <p>benchmarks 81:3</p> <p>bend 26:1</p> <p>beneficial 37:9</p> <p>Berchem 79:18 81:9,10</p> <p>biases 45:10</p> <p>big 22:12 54:8 61:21 64:11 72:21</p> <p>bigger 97:17</p> <p>biggest 29:12 46:21 81:17 100:8</p> <p>billion 32:19 76:7</p> <p>billionaire-funded 22:5</p> <p>billions 76:6</p> <p>bills 57:4</p> <p>biological 20:21 45:22,23 60:11 77:9</p> <p>biologist 4:8 38:3 42:8</p> <p>biologists 42:6</p> <p>biology 69:23</p> <p>bird 36:22 95:18</p> <p>birds 95:20 96:1</p> <p>birth 23:14</p> <p>births 26:16</p> <p>bit 24:1 37:12 38:21 77:16 89:3 96:8</p> <p>blocked 75:2</p> <p>blooms 62:9</p> <p>Blue 56:21 86:9</p>	<p>board 18:12</p> <p>boat 13:11,19,21 19:14 35:4 47:6 52:5 62:6,9,10 75:16 86:15 89:18 102:13, 18</p> <p>boater 25:15 58:2 93:10 95:9</p> <p>boater-induced 46:25</p> <p>boaters 25:13 46:16, 20 47:7 48:25 49:2,5 58:6 78:12 83:24</p> <p>boaters' 95:16</p> <p>boating 21:23 25:6, 14 46:11 47:17 49:6, 13 55:13,14 57:20 60:23 69:3 87:25 91:25 92:2 93:17 94:15 98:24</p> <p>boating-related 57:20</p> <p>boats 13:13,15,18 19:6,16 26:23 35:14 85:12 92:19 94:18, 21</p> <p>Bob 36:2 89:23,24</p> <p>body 25:22</p> <p>booning 6:20</p> <p>books 69:23</p> <p>born 23:7 26:13 79:8 101:1</p> <p>Bosiger 74:6 75:14, 15</p> <p>bottom 87:22</p> <p>boy 19:4 42:7</p> <p>boy-u-n-c-e 23:21</p> <p>brain 91:7</p> <p>bravely 19:13</p> <p>brazenly 28:23</p> <p>Brazil 11:1</p> <p>break 31:19</p> <p>breed 56:1</p>	<p>breeding-age 26:12</p> <p>Brevard 43:23 47:5 65:11,12 68:22 69:15</p> <p>bring 78:6</p> <p>brink 11:21 12:1 15:24 76:9 96:8</p> <p>broader 63:17</p> <p>broken 96:14</p> <p>brought 25:4 36:9 96:7</p> <p>brown 46:4 47:24,25 48:1 61:13 64:1,2</p> <p>Bryant 79:18,19,20</p> <p>budget 33:1,8</p> <p>bullet 100:22</p> <p>Bunce 23:19,20</p> <p>burden 51:17 52:1</p> <p>bus 35:6,9</p> <p>business 31:18 43:15 49:19,20</p> <p>bystanders 73:21</p> <hr/> <p style="text-align: center;">C</p> <hr/> <p>C-a-n-c-i-o 88:25</p> <p>C-a-n-o-n 72:24</p> <p>C-h-e-y-e-n-n-e 72:24</p> <p>C-l-i-n-g-e-r 43:23</p> <p>calf 23:14</p> <p>California 79:9,10, 11</p> <p>call 4:18 18:1 66:25</p> <p>called 8:15,17 94:24 101:16</p> <p>calling 8:14 68:23</p> <p>calls 45:6 65:15</p> <p>calm 18:19</p> <p>calves 23:7 26:13 66:6,8 75:2</p>	<p>campaign 74:25</p> <p>camper 83:10</p> <p>canals 87:16,17</p> <p>Cancio 87:2 88:23, 24</p> <p>candidate 31:15</p> <p>candidly 81:18</p> <p>Canon 70:24 72:23, 24</p> <p>capacity 83:25 84:12</p> <p>capricious 59:9</p> <p>captain 41:13,17,18 46:7 83:7 95:14 98:24 102:1,18</p> <p>capturing 42:2</p> <p>car 78:20</p> <p>carcass 42:19</p> <p>card 94:23</p> <p>care 17:12 97:13</p> <p>carelessness 35:2</p> <p>Caribbean 10:9 36:5</p> <p>carry 81:5</p> <p>carrying 83:25</p> <p>case 44:7</p> <p>cases 37:20</p> <p>cattle 66:17</p> <p>caught 97:5</p> <p>caused 19:14 35:12 70:4 75:4 94:15</p> <p>causing 62:6</p> <p>caution 46:14</p> <p>cautionary 45:20</p> <p>cave-in 22:5</p> <p>caveats 45:14</p> <p>cease 39:4</p> <p>celebrate 82:22 98:18</p>
---	--	---	--	---

<p>celebrating 74:12</p> <p>celebratory 96:9</p> <p>cell 3:10 78:20</p> <p>center 18:15 27:12 45:16 85:4</p> <p>Central 11:4,10 56:5</p> <p>challenge 38:25 53:3</p> <p>challenges 16:22</p> <p>challenging 66:11</p> <p>Chamber 55:9</p> <p>chance 48:14,17,20, 25 49:3,5,10 58:19</p> <p>chances 93:11</p> <p>change 7:16 15:25 16:5,7 23:23 24:1,2, 5,11 26:2 27:1,23,24 30:23 61:4 65:3 66:19 67:11 72:17 75:4 79:4,5 102:18</p> <p>changed 68:19</p> <p>changing 25:17</p> <p>channels 87:16</p> <p>characterizes 68:4</p> <p>chased 19:7</p> <p>Chassahowitzka 40:11</p> <p>check 57:13</p> <p>chemicals 32:20</p> <p>Chesapeake 10:25</p> <p>Cheyenne 70:24 72:23,24</p> <p>children 75:25 85:23 86:1</p> <p>chilly 79:6</p> <p>choose 45:18</p> <p>chooses 53:10</p> <p>Choosing 22:6</p> <p>chose 21:12</p> <p>chosen 21:25</p>	<p>chunk 66:1</p> <p>circling 65:5</p> <p>circumstances 34:18</p> <p>cites 24:25</p> <p>citizen 23:1 98:21</p> <p>citizens 87:5 90:1 96:18</p> <p>Citrus 42:15 75:25 76:3 92:10</p> <p>civility 6:15,17 7:6</p> <p>claim 81:5</p> <p>claims 33:4</p> <p>class 77:21</p> <p>classification 27:23</p> <p>classifies 24:15</p> <p>classifying 19:18</p> <p>clean 62:3</p> <p>clear 18:21 35:19 76:13 91:13 94:7</p> <p>Clearwater 25:7</p> <p>climate 27:1 61:4 66:19 75:4</p> <p>Clinger 43:21,22 46:4</p> <p>close 61:23 75:7 86:1,6 92:10</p> <p>closed 56:22</p> <p>Club 18:12 30:2 38:4 52:13 54:5 58:23 64:16 74:9 75:12,18 79:8 83:15</p> <p>coal 61:18</p> <p>Coast 51:15 95:14</p> <p>coastal 10:21 29:25 40:15 55:7 84:20</p> <p>Coastguard-licensed 83:6</p> <p>coastline 25:10</p> <p>coexist 95:19</p> <p>cold 20:7 26:25</p>	<p>42:20 43:8 47:16 51:14 56:8 61:4,20, 21 70:4</p> <p>collaborative 77:2</p> <p>collapse 84:22</p> <p>collecting 91:14</p> <p>College 30:4 31:16</p> <p>collision 13:15 60:4</p> <p>collisions 13:5 52:5</p> <p>colors 7:25</p> <p>commend 77:1</p> <p>comment 5:8 6:7 8:2 9:3 17:19 28:6 39:18 67:14</p> <p>comments 5:14,18 6:24 7:7,19,20 8:4, 21 9:1,2,7,12,21 17:3,5,8,10,14 22:8 28:5 39:17,25 44:1 46:3 67:14 69:8 92:24 93:19,20</p> <p>Commerce 55:9</p> <p>commercial 12:12 55:13,15 60:10,21</p> <p>Commission 41:4, 10,21 76:23</p> <p>commissioner 47:5 65:12</p> <p>commissioners 68:23 69:16</p> <p>commitments 53:20</p> <p>committed 54:3 77:22</p> <p>common 12:20 34:17 64:2 70:9</p> <p>community 25:14 77:22</p> <p>company 102:11,23</p> <p>compare 48:8 50:14</p> <p>compassion 89:15</p> <p>compelling 94:6</p> <p>complained 58:4</p>	<p>complaining 58:7</p> <p>complete 8:11 46:17 69:22 71:13 84:20</p> <p>completely 22:10 66:18 69:22 92:13</p> <p>compliance 16:15 83:21</p> <p>composed 77:20</p> <p>comprehensive 55:4</p> <p>computer 51:12,16 52:7</p> <p>conceivably 66:6</p> <p>concentrate 88:7</p> <p>concern 6:9 22:25 29:12 46:17 71:19 72:21</p> <p>concerned 22:25 67:25 100:3</p> <p>concerns 16:23 50:20 58:19</p> <p>concerted 79:20</p> <p>conclude 88:4</p> <p>conclusion 20:24 21:1 28:9 37:19 39:13</p> <p>condition 37:14</p> <p>conditions 61:5</p> <p>conform 58:25</p> <p>congratulate 96:10</p> <p>congratulated 77:4</p> <p>congratulations 29:22</p> <p>congregating 82:17</p> <p>congress 47:21</p> <p>congressmen 17:20</p> <p>congresspersons 17:20</p> <p>Conservancy 51:4</p> <p>conservation 13:6 14:8,22 16:10,20 29:25 30:8 38:23</p>	<p>41:4,10,21 42:5 52:12 66:23 76:23 77:2</p> <p>conservationist 36:3</p> <p>consideration 6:10 9:14 33:10 57:25</p> <p>considered 40:24 67:23 74:19 76:16</p> <p>consistent 63:16</p> <p>constant 55:2 60:20 80:9 99:18,25</p> <p>constantly 92:13</p> <p>constitutes 27:9</p> <p>consultation 16:18</p> <p>consumed 37:13</p> <p>contend 86:14</p> <p>content 19:24</p> <p>contingency 54:2 82:20</p> <p>continually 46:17</p> <p>continue 8:8,13 13:2 16:20 20:10 34:5,21, 25 35:21 61:25 74:3 75:1,10 80:13 84:3,4 90:17 94:8 96:17</p> <p>continued 12:17 13:9 32:23 34:11 36:25 47:17 68:25</p> <p>continues 39:9</p> <p>continuing 16:24 28:23</p> <p>contour 87:24</p> <p>control 13:24 14:1 29:7 53:10 83:16,17, 19,23</p> <p>controlled 44:6</p> <p>Coordinator 4:9</p> <p>copy 4:16,17,20,25</p> <p>Cora 79:18 81:9</p> <p>core 31:20 45:22 60:11</p>
---	--	---	--	--

<p>Corps 32:18 39:5</p> <p>correctly 8:25 22:18</p> <p>cost 4:16 41:8</p> <p>count 100:7</p> <p>counted 50:6 76:19, 21 88:2</p> <p>counterintuitive 68:8</p> <p>counterparts 87:20, 25</p> <p>counterproductive 80:3</p> <p>countless 70:19 76:8</p> <p>countries 25:2 59:8 66:14</p> <p>country 27:14 49:18,21</p> <p>county 28:22 42:16 43:23 47:5 61:15 65:11,12 68:22 69:4, 16 76:1,3 86:10 92:10 96:24 100:24, 25</p> <p>couple 56:21 64:5 78:5 82:6 91:15</p> <p>courses 66:17</p> <p>court 4:13 5:19,20, 23 8:24 22:19</p> <p>courtesy 6:16,17 7:6</p> <p>covered 7:19</p> <p>cows 52:25</p> <p>crab 14:15 19:6</p> <p>crammed 83:20</p> <p>crash 48:14,18 49:1, 4</p> <p>crashes 48:9,13,16, 17,24 49:1,2,5</p> <p>crass 20:20</p> <p>crazy 92:20</p> <p>create 4:15 62:16</p> <p>created 91:2</p> <p>creature 46:18</p>	<p>creatures 34:6 35:2, 23 86:7</p> <p>crisis 91:18</p> <p>criteria 53:25 73:10 77:15</p> <p>critical 10:15 21:20 32:14</p> <p>cross 5:21</p> <p>crossroads 53:16</p> <p>cruelty 19:10</p> <p>cruise 42:10 55:16</p> <p>crushed 14:2</p> <p>Crystal 36:3 37:3,6, 8 38:22 40:12 41:19 66:9 75:24 77:17 86:9 92:12,22 102:16,19</p> <p>cumulative 61:8 84:18</p> <p>curious 33:25 58:10 69:18</p> <p>current 9:23 15:20 25:22 26:3 44:22 52:14 55:6 60:19 69:14 74:13 80:9 85:9 86:21 89:25 99:17,24</p> <p>currents 32:12</p> <p>Curt 65:12</p> <p>curtailment 12:10</p> <p>cut 33:6 81:24</p> <p>cuts 33:1,8</p> <hr/> <p style="text-align: center;">D</p> <hr/> <p>D-a-g-m-a-r 96:23</p> <p>D-a-n-a 51:1</p> <p>D-e-b-r-a 64:2</p> <p>D-u-n-n 41:19</p> <p>dad 71:5</p> <p>Dagmar 95:5 96:22, 23</p> <p>damage 35:12</p>	<p>Dana 50:24,25 51:1</p> <p>danger 11:15,19,20 59:3,10 76:17 77:13</p> <p>dangered 15:22</p> <p>dangerous 24:5</p> <p>data 15:3 20:25 21:5 28:7 44:20 45:14 46:1 47:15 52:15 60:10,21 65:23 67:16 71:23 74:20 91:10,12 100:15</p> <p>David 24:8,9</p> <p>day 19:10 34:14,16 35:14 42:21 43:14, 16 69:2 71:16 73:25 82:18,24 84:8 86:3 99:21,23 100:2</p> <p>days 68:21 78:21</p> <p>DDT 78:10</p> <p>dead 91:14,17</p> <p>deal 53:13</p> <p>death 46:21 82:12</p> <p>deaths 26:15,18 34:25 49:9 70:5</p> <p>debate 5:24,25</p> <p>Debra 61:13 64:1</p> <p>decade 83:24 84:1,2</p> <p>decades 13:7 20:19 53:4</p> <p>decide 24:2</p> <p>decided 81:13</p> <p>decides 53:15</p> <p>decision 6:11 21:6 51:11 58:11 64:21 89:9,12 99:4</p> <p>decision-making 9:16 39:25</p> <p>decline 20:8 31:11 41:14 45:5 68:5 99:10</p> <p>declines 68:10</p> <p>declining 25:1 30:11 31:5 59:7 99:12</p>	<p>decommissioning 21:19</p> <p>deconstructing 62:17</p> <p>decrease 34:22 59:24</p> <p>decreased 61:1</p> <p>dedicated 76:12</p> <p>deep 56:20 84:8,10 87:18</p> <p>defend 38:18</p> <p>Defenders 28:3 100:18</p> <p>defense 73:21</p> <p>defenseless 19:4</p> <p>defies 47:12</p> <p>define 54:3</p> <p>definition 15:22 72:8,9 78:25</p> <p>definitions 11:13 24:14</p> <p>degree 72:25</p> <p>delay 54:12 61:7</p> <p>deliberately 45:6</p> <p>delightful 18:19 86:3</p> <p>delist 92:17,20 93:4 99:11</p> <p>delisting 25:24 33:8, 17</p> <p>delivery 83:7</p> <p>Delores 3:12 9:20 17:4</p> <p>demographics 15:2</p> <p>demonstrated 52:18</p> <p>denying 83:15</p> <p>depend 73:18</p> <p>depends 60:18</p> <p>depths 32:2</p> <p>deserve 20:4 43:15</p>	<p>62:20 73:24 77:4 88:21</p> <p>designated 46:23</p> <p>designation 46:10</p> <p>desist 39:5</p> <p>destroying 62:19</p> <p>destruction 59:15</p> <p>destructive 22:8</p> <p>detachable 90:5</p> <p>detailed 28:5</p> <p>determination 24:17</p> <p>determine 21:2 24:13 67:5</p> <p>determined 73:10</p> <p>devastating 19:15</p> <p>develop 53:17 54:2</p> <p>developers 19:25 25:7 57:19 72:7</p> <p>development 16:17 17:7 21:16 25:9,12 40:13 55:7,23 59:19 60:23 62:4 69:2 71:9 80:16</p> <p>devices 3:11 13:24 14:3</p> <p>devoted 70:18 77:12</p> <p>dialogue 8:13</p> <p>Diane 18:8,11</p> <p>dictionary 87:4</p> <p>die 42:9</p> <p>die-off 21:8 34:20 51:14</p> <p>die-offs 21:22 68:2</p> <p>die-outs 51:13</p> <p>died 21:11 26:17 40:8 43:8 49:4 51:10 79:23</p> <p>difference 24:24 50:19 63:5,19,21</p> <p>difficult 29:20</p>
---	--	--	--	--

<p>diligence 33:16</p> <p>diminish 57:6</p> <p>dine 57:24</p> <p>dire 45:19 91:21</p> <p>direct 5:21 37:19 62:11</p> <p>direction 94:13</p> <p>directly 8:15 18:2 19:25 62:12</p> <p>director 38:3 52:12</p> <p>disbanded 80:19</p> <p>discharges 13:4</p> <p>discovered 51:22</p> <p>discovery 32:6</p> <p>discuss 58:19 95:23</p> <p>discussed 41:5 59:14 60:11</p> <p>discussing 98:14</p> <p>discussion 5:5</p> <p>discussions 36:8</p> <p>disease 12:13 59:25</p> <p>disentanglement 14:19</p> <p>disingenuous 68:15</p> <p>Disney 97:7</p> <p>display 7:25 8:2,3</p> <p>displayed 18:6</p> <p>displaying 46:17</p> <p>displays 8:5</p> <p>disregarding 66:18</p> <p>disruptive 6:21</p> <p>disservice 20:9</p> <p>dissidents 66:23</p> <p>distressing 34:23</p> <p>diver 56:19 83:10</p> <p>divergent 45:17</p> <p>diversity 56:2 59:24</p> <p>diverted 37:3</p>	<p>docent 18:14</p> <p>document 45:1</p> <p>documented 45:2</p> <p>dollars 76:7</p> <p>dolphins 19:1</p> <p>dominoes 65:9</p> <p>donations 76:11</p> <p>doom 102:3,7</p> <p>door 35:9,11</p> <p>double 56:16</p> <p>doubt 35:12 57:2,17, 22</p> <p>Douglas 47:24,25</p> <p>downgrade 62:25 72:11,19 100:17</p> <p>downgraded 94:7</p> <p>downgrading 62:23 63:1 101:12</p> <p>downlist 22:6 24:22 34:7 40:6 41:25 51:7 64:18 66:11 68:8,12 69:20 85:7 86:4,20 89:10</p> <p>downlisted 25:21 39:14 49:14 65:4 73:4 75:16 78:9</p> <p>downlisting 20:18 23:3 27:6 43:18 47:1 48:2 52:8,14 53:6,11 54:10,12,21 57:18 60:6 61:7 70:3 73:12 75:10 80:2,20,24</p> <p>downward 94:8</p> <p>dragged 19:8</p> <p>drivers 48:10,13,17, 20</p> <p>driving 35:10</p> <p>drop 47:19</p> <p>drought 61:4</p> <p>dry 28:20</p> <p>DT 78:10</p> <p>due 6:10 9:14 21:14</p>	<p>27:1 33:16 35:2 43:8,23 51:6 52:2,4 53:16 70:10 72:2 74:13</p> <p>duly 17:5</p> <p>dump 32:19</p> <p>Dunn 41:13,17,18</p> <p>dying 19:12 37:8 48:21 49:6,10 74:21</p> <hr/> <p style="text-align: center;">E</p> <hr/> <p>E-d-b-r-o-o-k-e 100:14</p> <p>E-i-c-k-e-n-b-e-r-g 46:8</p> <p>Eagle 36:22</p> <p>earlier 6:5 23:24 51:22 59:14 60:11</p> <p>easily 47:18 68:19</p> <p>East 51:15</p> <p>easy 40:12</p> <p>eat 40:22 84:7 97:13</p> <p>eaten 19:5 84:11</p> <p>eating 75:2 84:14</p> <p>Ecological 4:1</p> <p>ecology 89:5 94:14</p> <p>economic 25:8,12 55:12</p> <p>economy 85:21</p> <p>ecosystem 37:18 73:18 74:4 84:6,20</p> <p>Edbrooke 98:19 100:12,13</p> <p>Eden 18:19 62:16,18</p> <p>educated 63:4</p> <p>Education 27:12</p> <p>educational 12:13 18:15 46:20 85:13 99:16</p> <p>effect 47:2 84:18</p> <p>effective 54:23</p>	<p>68:25 87:9 88:5,8,19</p> <p>effects 84:17</p> <p>effort 22:9 37:3 42:3 46:20 47:10 53:13 79:20 83:2</p> <p>efforts 16:20 28:21 73:6 77:2 84:23 101:5,8</p> <p>ego 62:14,15</p> <p>Eickenberg 43:21 46:6,7</p> <p>elected 17:21 36:20</p> <p>electric 4:20 40:15</p> <p>electronically 17:11 92:25</p> <p>eliminated 65:7 78:11</p> <p>eliminating 78:12, 14</p> <p>Elizabeth 26:6 28:2, 3</p> <p>embarrassing 57:14 58:6</p> <p>emotion 91:9 95:25</p> <p>emotional 6:25 83:4 91:7 99:4</p> <p>emphasis 37:23</p> <p>employees 66:20</p> <p>enacted 68:17</p> <p>encroachments 78:14</p> <p>end 8:4 39:25 45:4</p> <p>endanger 27:22</p> <p>endangered 3:8 9:23,24 10:1,2,11 11:12,14,23 12:5 16:8 19:19 22:2 24:3,22 36:14 40:7 41:25 46:9 47:4,11, 21 48:4 50:15 51:8 52:19 59:1,2 61:10 62:24 63:8,20 64:18 67:12 72:20 73:8,11, 14 76:6,25 77:6 78:18 79:3 85:8</p>	<p>86:21 93:21 94:4 97:12,21 98:2,17</p> <p>ends 58:13</p> <p>endure 35:2</p> <p>endured 19:13</p> <p>enforce 41:8 69:18 88:14</p> <p>enforcement 41:6 48:6 80:14</p> <p>engaged 13:22</p> <p>engineer 51:5</p> <p>engineering 54:20</p> <p>Engineers 32:19 39:5</p> <p>enhancing 101:13</p> <p>enjoy 27:20 70:14 85:14 86:4 92:13 96:19 97:24</p> <p>enjoyed 86:2 95:11</p> <p>ensure 3:17,20 4:11 5:12 29:10 70:12</p> <p>entangled 14:15</p> <p>entanglement 70:8</p> <p>entanglements 12:23 14:14 62:8</p> <p>enter 75:5</p> <p>enthusiasts 95:18</p> <p>entire 19:21 43:5 52:16 64:18 67:22 71:5 95:25</p> <p>entirety 59:16</p> <p>entity 10:5</p> <p>environment 3:18 19:22 71:5,14,17 72:2 77:14 78:10</p> <p>environmental 30:4 49:22,24 51:3,5 71:4 73:1 80:14 84:22</p> <p>environmentalists 84:4</p> <p>epiphany 83:14</p>
--	---	--	---	---

<p>equal 5:13</p> <p>equally 3:22</p> <p>equivalent 35:5 47:8</p> <p>erosion 46:25</p> <p>ESA 24:23 45:20 68:14 77:7</p> <p>essence 38:12 90:23</p> <p>essential 59:17</p> <p>establish 76:2</p> <p>established 5:11</p> <p>establishing 81:3</p> <p>estimate 26:10</p> <p>estimated 44:23 67:22 76:15</p> <p>estimation 45:11</p> <p>estuaries 18:22 20:3 32:20 36:6 84:11</p> <p>estuary 31:6</p> <p>ethical 70:11</p> <p>evaluating 88:9</p> <p>evaluation 12:4,6 14:23 17:7</p> <p>evening 17:9,14</p> <p>event 47:16 74:16,22 81:18</p> <p>events 32:16 51:14 60:13,15 61:5</p> <p>ever-expanding 84:19</p> <p>ever-increasing 37:13</p> <p>evidence 24:13 27:8 36:16 39:12 54:24</p> <p>evolved 18:18</p> <p>exact 35:19 43:9</p> <p>examinations 5:22</p> <p>examine 38:12</p> <p>exceed 30:16</p> <p>exceeded 26:18</p>	<p>exception 100:22</p> <p>excerpt 10:3</p> <p>excuse 80:17,25</p> <p>executive 38:3</p> <p>exist 90:13,15,16</p> <p>existed 62:18</p> <p>existence 12:17 18:21 32:24 37:1 47:2</p> <p>existing 12:15 59:19</p> <p>expanded 84:14</p> <p>expect 36:13,18</p> <p>expected 21:14 60:24</p> <p>experience 48:5 85:25</p> <p>experienced 7:2 32:3 47:14</p> <p>expert 28:7</p> <p>experts 36:19 72:4 89:4</p> <p>explain 32:17</p> <p>explained 42:9</p> <p>explaining 22:24</p> <p>exponentially 84:14</p> <p>express 52:13 58:10</p> <p>extended 76:10</p> <p>extending 63:17</p> <p>extensive 39:17</p> <p>extinct 79:11,14 91:23</p> <p>extinction 11:16,19, 20,21 12:1 15:24 24:16 59:3,11 76:9, 17 77:13 79:22 90:15</p> <p>extra 64:5</p> <p>extreme 60:13</p> <p>extremely 20:17</p>	<p style="text-align: center;">F</p> <hr/> <p>F-i-s-h-m-a-n 69:11</p> <p>F-l-e-m-i-n-g 28:4</p> <p>face 13:2 34:11 44:11 53:3 60:2 70:7,16 73:7 75:15</p> <p>Facebook 19:9</p> <p>faced 55:3</p> <p>facilities 61:16</p> <p>facing 12:18 35:15 100:9</p> <p>fact 27:8 33:14 40:24 68:21 87:13 92:4,14 99:2,6</p> <p>factor 32:25 33:9 34:23</p> <p>factors 12:8,16 29:2 86:23</p> <p>facts 21:6 32:11 81:5 92:4 95:23 96:5,13 99:3</p> <p>fail 53:16</p> <p>fails 90:7</p> <p>fair 5:13</p> <p>fairly 3:22</p> <p>falcon 78:9</p> <p>fall 65:9 80:6</p> <p>family 34:13</p> <p>fancy 100:14</p> <p>fast 23:16 64:6,8 73:20</p> <p>fatalities 48:9 82:7,8</p> <p>fate 67:5</p> <p>fauna 37:21 87:5</p> <p>favor 93:20</p> <p>favorable 61:5</p> <p>fears 96:4</p> <p>February 3:4 32:1 42:19,20,21</p>	<p>federal 4:22,24 16:9 17:21 28:20 29:9 53:9 68:13 77:6,18 80:17</p> <p>federally 77:15</p> <p>feed 32:21</p> <p>feedback 39:23</p> <p>feel 23:2 73:19 74:9, 12 75:10 78:25</p> <p>feeling 96:9</p> <p>feet 79:1</p> <p>felt 95:19</p> <p>female 23:13 66:5 95:1</p> <p>females 26:12 66:2 82:11</p> <p>fertilizer 52:4 74:21</p> <p>Field 4:4</p> <p>fifth-generation 100:23</p> <p>Fifty 31:2</p> <p>Fifty-two 88:2</p> <p>fight 44:8</p> <p>fighting 62:22</p> <p>figure 44:21 53:5</p> <p>figures 95:23 99:8</p> <p>filled 20:2</p> <p>final 6:11 9:15 17:7 20:8 22:11 64:21 65:14</p> <p>finally 6:12 39:11,19 64:23</p> <p>financial 37:20 77:11 98:22</p> <p>find 7:18 24:23,24 32:6 88:19 97:23 102:14</p> <p>finding 24:25 52:21 53:12 97:20</p> <p>finish 82:21</p> <p>firms 64:11</p>	<p>fish 3:5,13,16,25 4:3, 12 5:25 6:9,14 9:4,8, 13,15 18:16 28:16 38:8 41:3,10,20 44:2,18 58:23 76:22, 23 84:6 85:6 86:19</p> <p>fisherman 55:15 83:11</p> <p>fishing 12:23 14:14 19:7 27:4 62:7 65:13</p> <p>Fishman 67:7,8 69:10,11</p> <p>fit 79:1</p> <p>fits 15:22</p> <p>five-factor 12:7</p> <p>five-part 59:13</p> <p>five-year 44:25</p> <p>fix 91:25</p> <p>fixed 90:18</p> <p>flag 28:24 79:10</p> <p>flawed 47:15</p> <p>Fleming 28:2,3</p> <p>Flemming 26:6</p> <p>flick 65:17</p> <p>flipper 19:11</p> <p>flock 57:23</p> <p>flora 37:21 87:5</p> <p>Florida 4:2,9 10:6, 12,16,17,19,21 11:6 13:9 14:8,13 15:15 18:18 20:6 21:14 22:22 23:4,6 26:11, 24 27:18 28:22 30:7, 16,17,19 31:1,7 32:12,13 33:13 34:1, 8,13,14,17,18 37:11 39:15 40:5,9 41:3,21 48:7,12,13,19,22,23 49:11,19 51:10 52:21,24 53:9,10,19, 22 54:18 55:9,10 56:19 57:3 58:17,18 62:5,17,20 65:5 66:13 69:1 71:2 72:25 74:8 76:20,23 79:24 80:15,24 83:5,</p>
---	--	---	--	---

<p>8 85:3,16 86:11 87:4 89:7 95:9,10,13 96:18,20,25 97:1,4, 7,24 98:5,6,10,15,22 99:1 100:5</p> <p>Florida's 46:11 74:3 90:1</p> <p>Floridian 75:23 100:23</p> <p>flows 59:18</p> <p>focus 35:20</p> <p>focusing 80:19</p> <p>folks 43:13 66:9 87:7 102:8</p> <p>follow 35:25 96:14, 15</p> <p>food 32:14 37:10 75:2</p> <p>foot 87:18</p> <p>forbid 58:8</p> <p>force 16:15 54:2</p> <p>forecast 15:12</p> <p>foresee 16:19</p> <p>foreseeable 11:24 16:21</p> <p>forget 81:21</p> <p>forgive 22:15</p> <p>forgot 92:25</p> <p>form 28:8 45:15 88:10</p> <p>formal 5:20 38:14</p> <p>formally 39:20</p> <p>Fort 18:14 27:12 86:11</p> <p>fortunately 37:5</p> <p>fortune 34:1</p> <p>forward 7:4 17:13, 25 50:3 80:23</p> <p>fought 44:8</p> <p>found 10:22 11:2,3, 6,8 15:4,7 25:3 59:6, 8 93:14,18 95:22</p>	<p>founded 95:15</p> <p>founder 90:1</p> <p>four-fold 3:16</p> <p>fourth-generation 75:23</p> <p>fragmentation 12:22</p> <p>frame 3:20 18:5</p> <p>frames 8:7</p> <p>free 41:9 56:19</p> <p>Freedman 101:25</p> <p>freezing 79:5</p> <p>frequency 26:25</p> <p>frequently 40:10</p> <p>friend 81:14,21</p> <p>friendly 3:18</p> <p>friends 85:23</p> <p>front 5:1 8:16,18 35:9 92:9 93:3</p> <p>FSCR 37:15</p> <p>fulfilling 38:15</p> <p>full 12:2</p> <p>fully 75:19</p> <p>functional 73:17</p> <p>fund 66:24</p> <p>funding 66:23</p> <p>funds 84:1</p> <p>future 11:24 16:21 21:18 26:23 33:5,12 43:16 44:11 48:3 52:22 53:17 54:4,9, 12 56:12 59:21 66:4 67:2 69:8 70:14 80:22 82:2,22 86:4, 24 97:5 101:11</p> <p>FWC 23:1 48:23</p> <p>FWC'S 43:9</p> <p>FWS 24:21 73:10 85:13 87:15</p>	<p style="text-align: center;">G</p> <hr/> <p>G-a-t-e-l-l 96:23</p> <p>Gainesville 54:20</p> <p>gallons 32:20</p> <p>garden 18:19</p> <p>Gatell 95:5 96:22,23</p> <p>gather 61:20</p> <p>gave 56:25</p> <p>gear 12:23 14:14</p> <p>gene 56:2</p> <p>generated 83:19</p> <p>generation 66:1</p> <p>generations 70:14 86:4,24 95:21 101:6, 11</p> <p>generous 76:11</p> <p>genetic 59:24</p> <p>gentle 33:25 35:22 85:18</p> <p>gentlemen 32:4 41:18 85:1</p> <p>geographic 76:18</p> <p>Germany 96:25</p> <p>giant 84:19</p> <p>giants 85:18</p> <p>gift 101:7,11</p> <p>girls 100:19 101:8</p> <p>give 5:4 6:10 9:3 13:16 39:23 42:17 98:1 100:15,20</p> <p>glad 91:10</p> <p>global 72:2</p> <p>gloom 102:3,7</p> <p>goal 77:5</p> <p>God 58:7</p> <p>golf 66:17</p> <p>good 3:3 18:9 19:5 23:19 26:12 28:2 29:18 34:1 41:17</p>	<p>46:6 49:16 50:7,25 52:11 56:15 62:25 66:8 70:25 78:1 81:14 84:25 88:10, 23 92:6 93:8 95:6 101:4</p> <p>Goodrich 79:18,19, 20</p> <p>Google 99:19</p> <p>government 17:22 64:12 66:15,16,25 97:18</p> <p>grandchildren 75:25</p> <p>grass 77:23</p> <p>grateful 34:3</p> <p>grazing 92:14</p> <p>great 31:25 32:2 34:2 53:13 60:2 85:13,19 89:2 95:11 96:19 98:5 101:7</p> <p>Greater 11:4,9</p> <p>greatest 19:16 53:2</p> <p>greatly 26:15,16 60:1</p> <p>greed 19:11</p> <p>green 7:25 8:1</p> <p>grew 100:23,24</p> <p>Grizzly 79:11</p> <p>ground 5:5,9,10 9:17,18 54:25</p> <p>group 66:9 77:20 79:1 95:18 97:17</p> <p>groups 25:5 26:2 30:18 51:3 77:2</p> <p>grow 84:13</p> <p>growing 19:20 21:13,14 22:2 30:14, 19 34:19 44:4</p> <p>growth 15:14 37:17 45:2 51:17,21 52:1,6 55:8,12,22 60:16 83:16,17,19,23</p> <p>guarantee 29:4</p>	<p>69:18</p> <p>Guard 95:14</p> <p>guards 94:17,21</p> <p>guess 95:4</p> <p>guys 18:16 50:1 72:4 87:15 96:5,10</p> <hr/> <p style="text-align: center;">H</p> <hr/> <p>H-o-d-o-v-a-l 54:18</p> <p>H-o-l-b-r-o-o-k 58:22</p> <p>habitat 10:15 12:11, 21 13:3 14:12 21:17 30:24 31:5 37:3,4, 16,23 52:5 54:10 59:15 61:2 70:8 75:5 77:23 79:21 81:2 86:15 90:24</p> <p>habitats 25:9 44:6 78:15 97:14</p> <p>hall 7:10</p> <p>hand 19:12</p> <p>hands 87:10</p> <p>happen 20:10 25:6, 25 30:15 36:21 57:23 64:25 74:23 92:18</p> <p>happened 41:11 102:10</p> <p>happening 15:12 29:14 79:12</p> <p>happy 7:13 20:21</p> <p>harassing 6:20</p> <p>harassment 41:7 70:7 92:15</p> <p>hard 35:25 54:11 71:17 91:6</p> <p>hard-fought-for 20:15</p> <p>harm 101:15</p> <p>harming 35:8</p> <p>Harvey 56:14 58:21</p>
--	---	--	--	---

head 42:6 99:6	hit 19:5,15	I	include 6:6 10:14 21:7 51:12 60:13 61:4	individuals 15:18 17:23 57:21 58:18 77:3 80:7 89:4,13
health 35:16 78:20	Hodoval 54:16,17		included 6:8 44:14 45:10 82:9	indoctrinated 36:10
healthy 27:9 37:17 56:3	Holbrook 56:14 58:21,22		includes 15:8 44:24	industry 25:6 57:20
hear 72:12 89:3 94:18 97:9 99:8	hold 58:11,16 79:13		including 11:5 16:13 25:5 37:5 46:24 59:23 68:16 71:23	inevitable 47:16
heard 5:14,17 6:23 31:9 32:18 37:2 83:16 88:16 91:8,9 102:2,6	home 35:8 42:23 46:19 70:21,22 84:11		incorporated 44:19	information 9:12 15:1,20 28:8 38:19 39:13,20,24 45:24 51:23 67:23 89:11 94:6,20 99:14
hearing 3:6,9,14 4:11,14 5:3,10,16,20 6:12 7:1,22 17:19 39:21 100:13	homes 20:1		incorrigible 73:22	inhabitants 37:11
heartfelt 100:16	Homosassa 14:10 40:11 85:22 92:11, 23		increase 25:8,12,13 26:20,25 27:7 28:14 31:24 34:21 39:8 50:8 52:2 53:14 55:11 60:22,24 62:5, 6,7 73:13 74:25 76:13 90:17	initial 31:17
Heather 74:6,7	honestly 54:23 63:21		increased 21:15 23:11 34:9,11 52:3 62:4 74:12,14 82:1 91:18	initiative 83:24
heavily 21:3 60:12	hope 38:22 39:9 43:16 81:22		increases 21:14 59:24 72:3	injure 49:2
held 5:3 19:11 41:4 81:22	hoping 22:11 40:22		increasing 26:9 32:11,15 35:16 55:23 59:18 63:15 71:25 102:8	injured 42:24 48:18 49:3 85:11
Helen 38:1 40:3,4	horrible 70:3,16		incredibly 96:6	injuries 13:18 19:13,14 34:24 35:1, 4 46:21 48:9
helped 44:9 77:3	horrifying 81:24		indefinitely 60:20 80:10	injury 48:17 49:1
helping 19:19 39:7 54:3	hour 56:24		independent 3:15 28:7	ink 28:19
herbivores 84:19	hours 70:19		impacted 46:13	innocent 73:21
Herrington 4:3	house 84:11		impacts 61:3 94:13	input 39:22
hey 43:4	huge 28:24 51:19 95:12		impartial 3:15	insanely 45:1
high 45:22 66:2	human 20:6 21:15, 23 35:2,5 37:20 49:22 51:6,17,21 52:1,4,6 69:2 70:10 73:22 89:2		impartially 36:21	insight 56:25
high-powered 66:10	humane 57:9 67:10		implemented 13:23 50:17	insights 45:12
highest 45:1 79:25	humanitarian 89:1		implications 45:19	inspire 38:24
highly 35:12	humans 43:5 62:17 70:9		implies 99:22	instances 14:11
highway 48:9	humble 42:3		implore 29:8 35:20 54:22 56:10	Institute 67:20
Hillsborough 61:15	humiliated 89:3		importance 9:18 36:6 42:4 65:19	instructor 93:10
hire 64:10	hundreds 82:16		important 5:11 11:11 14:12 21:5 22:16 28:12 63:2 72:12 85:3,10 98:16	integral 21:6 85:17
hired 3:12 4:13	hunted 56:6		improve 28:14	integrity 22:12
hissing 6:20	Hurley 98:19,20,21		improved 53:24 78:22	intent 44:3 66:22
historian 30:3	hurricanes 45:15		improvements 39:9	intention 32:5 77:7
historic 10:8	hurt 19:23		inadequacy 12:14	interbreed 55:25
Historically 14:1	husband 85:22			intercoastal 83:8
history 81:17			Indicating 101:20	interest 22:6 25:5 26:1 98:24

interested 71:4	Joseph 29:17,18,23	ladies 32:4 41:17 84:25	legislation 57:22	25:24 62:24 76:6 77:6 85:8 86:21 93:21
interesting 79:9 93:13,19	justification 29:1	lagoon 27:2 31:6 46:2	legislative 25:22 57:24	listed 10:4,12 77:8 78:17
interests 21:16 27:22	justify 52:16	land 25:7 57:18,19 62:21 87:22	legislators 57:4,11 66:21	listen 93:2,4
international 30:7 90:2	justifying 23:25	landowners 57:19	legislators' 57:17	listening 99:5
interpretation 11:18	<hr/> K <hr/>	lane 18:24	legislature 26:1 57:7,8	listing 10:13 68:19
introduce 3:23	K-a-l-v-i-n 83:1	large 7:23 27:5 74:10,17 82:7 87:16	leisurely 18:22	literally 102:18
investors 31:25	K-o-v-a-r 51:1	large-scale 94:10	Leslie 79:18,19	live 34:1 43:23 57:15 62:21 69:15 75:25 78:13 79:8 85:2 89:15 92:10 96:24 97:16 98:21,25
involved 46:15 64:10 71:3	Kalvin 82:24,25 83:1	largest 31:1,6	Lesser 11:4,9	lived 18:20 54:19 95:10 99:1
irony 50:9	Karen 22:21 23:19, 20 101:25	Larry 3:24,25	letting 33:13	living 36:4 66:7
island 18:13 36:7 86:10	Kate 67:7,9	late 13:8	level 28:22 47:13 55:1 69:4	local 17:22 36:7 42:23 60:3 68:18
isolated 34:17 55:25	Katie 50:24 52:11	launch 5:8	levels 44:22 52:3 80:1	located 4:2,9
issue 31:17,20 34:20 83:3	kayak 92:12	Lauressa 70:24,25 71:1	licensed 46:10 48:10	locks 13:25
issues 31:20 33:2,9 43:25 49:22 51:6 54:8 57:9	keeping 93:21	law 38:17 48:6 60:10 64:11	life 18:24 58:9 66:8 71:5 89:2 95:10 97:23 100:21	logic 47:12
<hr/> J <hr/>	Kelly 54:16,17,18	laws 26:2 53:8 80:14 83:18 92:22	life-threatening 13:19	logical 80:11
J-a-n-a 24:20	key 6:15 53:25	lawsuit 38:24	lifestyle 18:23	long 19:21 20:5 62:18 67:4 72:19
Jacksonville 4:5,9 54:19	kid 71:5	layperson 99:22	lifetime 66:6	long-term 68:5,9
jammed 40:19,20	kids 19:8	leaching 55:2	light 8:1,3,5 86:12	long-time 20:14 41:19
Jana 24:8,20	kill 100:5	lead 4:6	lights 18:6	longer 15:21 47:4 52:18 61:10 76:16 81:6
January 16:3 63:13 68:11	killed 48:19 67:21 85:12	leaders 69:3	likelihood 68:9 73:13	looked 31:16 45:23
Jay 4:3	killers 19:17	learn 85:14	likewise 61:2	looming 21:18
Jennifer 56:14,15, 16	kind 18:11,18 65:10 90:24 93:13,18,22, 24 94:8	learned 36:5	limit 30:25 91:25 92:2	lose 23:8 99:7
jet 92:20	kindness 89:15	learning 86:2	limitation 90:23	losing 40:15 99:6
Jim 4:7 5:6 9:19 82:24,25 87:11 91:4	Kings 39:3,6 77:24 92:11,22	leave 8:6 9:5 17:12 24:4 86:21	limitations 43:24	loss 12:22 13:3 52:5, 23 65:24 68:5 70:8 86:15
job 36:20 82:21 88:20	knew 91:16	leaves 8:19	limited 23:16 45:13 90:21	losses 50:11,13
John 26:6,7	Kovar 50:24,25 51:1	led 34:4	limits 7:21,24 68:16	lost 63:12,13 65:25 66:3
Johns 30:18 45:3	<hr/> L <hr/>	Lee 82:24 86:10	lines 19:7	
	L-a-u-r-e-s-s-a 71:1	left 3:24 37:10 64:13 71:7 77:16 81:16 95:1	Lisa 4:13 67:7 75:21, 22 98:19,20	
	L-e-g-g-e-t-t 85:2	legal 4:19 11:18 66:10 73:14	Lisa's 4:18	
	L-y-n-n 64:2	Leggett 84:25 85:2 95:3,4	list 9:24 10:2,3 16:8	
	lack 46:17			

<p>lot 36:5 43:8 52:25 53:4 54:25 55:13,14, 15,24 56:25 64:25 66:13 72:13 81:23 83:5 88:16 91:9 92:15 94:5,6,14 100:15 102:2,7</p> <p>loud 6:19</p> <p>love 58:14 76:2 78:19</p> <p>loveable 36:17</p> <p>lovely 61:22</p> <p>lover 89:2 95:12</p> <p>Lynn 61:13 64:1</p> <p>Lyons 93:7 94:23, 24,25</p> <hr/> <p style="text-align: center;">M</p> <hr/> <p>M-a-r-i-e 88:24</p> <p>M-a-r-q-u-e-z 56:17</p> <p>M-e-g-a-n 33:22</p> <p>M-i-l-l-s-a-p 102:2</p> <p>M-i-m-i 85:1</p> <p>M-o-o-r-e 75:23</p> <p>Macfall 67:7,9</p> <p>made 19:19 20:15 33:3 38:10 40:14 43:1</p> <p>magic 63:22</p> <p>mail 9:7 17:11,17</p> <p>maintain 3:17 5:12 35:20</p> <p>major 17:18 50:20 66:3 68:6</p> <p>make 3:18 17:8 24:17 26:2 31:17 40:3 64:24 71:22 76:13 77:3 89:13 98:1,13 99:4</p> <p>makes 6:11 60:6</p> <p>making 38:13 99:8</p>	<p>man-created 62:15</p> <p>mana- 19:18</p> <p>managed 91:3</p> <p>management 53:2 83:20 90:7,8,9</p> <p>manager 90:5</p> <p>managing 90:4,11, 14</p> <p>manatee 3:7 4:6,8 9:22,25 10:4,6,12, 14,19,20,24 11:8 12:5,19,21 13:2,6, 10,23 14:4,12,17,24 15:8,13,21,24 16:7, 9,13 17:4 18:12,14 19:12 20:16 21:11 22:10 23:2 26:9,20, 22 27:11 30:2 31:1 33:17 34:4 35:4 37:14 38:4 39:1,15 40:7,22 42:3,4,22 44:13 46:14,16,21 47:9 48:2 49:8,9,11 51:2,8,20 52:13,17, 21 53:14,18 54:5 55:21 56:24 58:23, 25 59:10,14,17 60:5 61:10 64:14,15 66:4, 11 67:1 69:5,21 73:3,12 74:9,25 75:12,18 76:2,5,14, 24 77:19,24 78:15, 24 79:7,12,21,23 80:2,3,24 82:9 83:15,23 85:4,15 86:11 89:5,10 90:18, 23,24 91:22 93:15, 21 95:13 96:7,16,20 97:3,8,10,11,16 100:17 101:1,2,7,9 102:25</p> <p>manatee's 53:23 60:25</p> <p>manatees 9:25 10:21,24,25 12:24 13:15,16,17,21 14:2, 15 15:3,7,9,10,14 16:7 18:18 19:4,10, 18,23,24 20:6 21:13, 20 23:4,10,11 24:12, 22 25:2,18 26:11,17 27:5,6,9,15,19 28:13</p>	<p>29:23 30:6 31:2,21 32:8,15,21 33:25 34:2,10,23 35:14,15, 18 36:8 37:6 39:3,14 40:8,10,14,17,18,25 41:7,9,23,25 42:9, 15,24 43:2,14,15,18 44:4,9,11,24 45:22 46:23 47:3,8 48:4 49:13 51:10,13 52:24 53:8,15 54:7 59:8,22 60:2,22 61:19 62:13 63:13, 23 65:2,4,16 67:12, 21 68:2,12 69:20,24 70:1,7,13,17,20 73:7,17,20 74:9,16 75:4,15 76:3,9,19,21 78:11,17 79:22 80:20 81:6,11,14,24 82:14,17,20 84:9,12 85:5,7,11,16,24 86:8,12,20 88:2,3,8, 20 89:8,14 92:14,17 93:11 94:1,9 97:13, 14,22 98:2,11,16 99:7,9,23 100:1,4,7 102:8,12,14,16,17,24</p> <p>manatees' 35:21 46:9 70:21 75:18 82:21 90:21 101:13</p> <p>mandates 36:14</p> <p>mandatory 16:16</p> <p>mangled 19:6</p> <p>manhours 76:8</p> <p>manmade 12:16</p> <p>manpower 77:11</p> <p>map 10:23</p> <p>Marie 87:2 88:23,24</p> <p>marinas 30:21</p> <p>Marine 46:10</p> <p>Marquez 56:14,15, 17</p> <p>Marshes 29:24</p> <p>Mary 93:7 94:23,24</p> <p>Maryland/virginia 11:1</p>	<p>massive 19:13 21:7 51:13 81:18</p> <p>master 83:7</p> <p>mathematical 44:21</p> <p>mathematician 91:8</p> <p>mathematics 90:3</p> <p>matter 6:11 23:25 33:14 58:12 64:9 65:3 73:18 74:24</p> <p>mature 66:5 75:19</p> <p>maturity 23:15</p> <p>MBA 31:15</p> <p>Mcfall 67:9</p> <p>meaning 26:12</p> <p>means 14:18 55:12 59:2 63:7,8 72:13</p> <p>meant 11:19</p> <p>measure 89:16</p> <p>measures 13:7 16:10,11,15 60:1 85:9 86:22 89:16</p> <p>meat 64:9</p> <p>mechanisms 12:15</p> <p>meet 77:14</p> <p>meeting 25:11 41:4 58:12</p> <p>meetings 58:17</p> <p>meets 65:11</p> <p>Megan 33:19,20</p> <p>Melissa 67:7 69:10, 11</p> <p>member 6:22 7:12 9:4,10 18:11,13 31:9 38:10 85:3 100:17 101:20</p> <p>members 5:25 6:1, 13,14 7:5</p> <p>mention 32:1 77:17</p> <p>mentioned 37:2 65:10 87:12 93:23</p>	<p>Mercer 33:19 35:24 36:2</p> <p>Merchant 46:10</p> <p>Merritt 86:10</p> <p>message 72:6,8,12 100:16</p> <p>messages 42:23</p> <p>met 19:17</p> <p>metrics 33:15</p> <p>Mexico 11:3</p> <p>Miami-key 30:12</p> <p>Michael 101:24 102:1,6</p> <p>Michael-i-n-a 78:3</p> <p>microphone 8:23 102:5</p> <p>mid-june 32:21</p> <p>middle 8:10</p> <p>migrating 31:1</p> <p>Mike 102:1</p> <p>million 30:16 48:10, 11 55:11</p> <p>Millsap 101:24 102:1,2,6</p> <p>Mimi 84:25 85:1 95:3,4</p> <p>Mina 75:21 78:1,3</p> <p>mind 7:1,15,17 33:23</p> <p>mine 81:14</p> <p>minimizing 98:9</p> <p>minimum 23:9 58:16 79:25</p> <p>minutes 7:22 38:5 64:5</p> <p>misguided 27:8</p> <p>mispronounce 22:15</p> <p>misuse 91:9</p> <p>mode 91:19</p>
---	--	--	---	--

<p>model 15:11,16 39:19 44:21 45:23 51:12,16 52:7 55:6 60:12,18 61:1 71:21, 22 80:4 99:13,17,24 100:2</p> <p>modeling 55:3</p> <p>models 15:13 21:4 38:7 44:20 45:16,17 54:25 55:1,2,3</p> <p>moderate 3:13</p> <p>modest 27:7</p> <p>modification 12:10</p> <p>modified 10:13</p> <p>molding 78:25</p> <p>mom 100:19</p> <p>money 53:5 64:10</p> <p>month 65:11</p> <p>Monticello 87:4</p> <p>Moore 75:21,22</p> <p>moral 70:12</p> <p>Morgan 18:8,9,11</p> <p>mortalities 43:7</p> <p>mortality 32:16 43:10 44:13,22 45:4, 7 52:2 60:13 65:11 80:2 81:1,18 90:12</p> <p>mother 89:1</p> <p>mothers 75:1 85:25</p> <p>mouth 11:2</p> <p>move 17:25 52:25 80:23 102:5,22</p> <p>moved 49:18 97:1 102:22</p> <p>moving 35:6 50:3 62:23,24 69:1,2</p> <p>MRP 14:18</p> <p>Murphy 74:6,7,8</p> <p>Myers 86:11</p>	<p style="text-align: center;">N</p> <hr/> <p>N-a-p-o-l-e-s 92:8</p> <p>N-e-l-s-o-n 71:2</p> <p>N-o 22:13</p> <p>naive 73:25</p> <p>names 18:1 101:17</p> <p>nap 86:17</p> <p>Napoles 89:23 92:6, 7</p> <p>national 36:22 50:10</p> <p>native 22:23 54:18 56:19 71:3 72:25 74:8 83:5 95:9</p> <p>natives 85:16</p> <p>natural 12:16 37:16 71:13</p> <p>naturally 21:17</p> <p>nature 30:8 51:4 74:10</p> <p>navigation 13:25</p> <p>Nearing 18:8 20:13</p> <p>necessarily 30:13 56:5 72:14</p> <p>needed 16:12</p> <p>needing 37:22</p> <p>negative 98:15</p> <p>negatively 60:16</p> <p>neiboring 96:24</p> <p>Nelson 70:24,25 71:1</p> <p>nervous 7:3 64:7</p> <p>network 13:10</p> <p>newborn 74:1</p> <p>news 31:25</p> <p>nice 86:8</p> <p>Nicole 61:13,14</p> <p>nitrogen 52:3</p>	<p>no-wake 34:25 46:18,22</p> <p>noises 6:20</p> <p>non-adversarial 3:18</p> <p>non-fatal 49:12</p> <p>north 58:17 95:15</p> <p>northeast 68:3</p> <p>northwest 30:19</p> <p>noted 17:6</p> <p>notes 92:25</p> <p>nothing's 23:23</p> <p>notice 4:22,25 28:20</p> <p>nowadays 14:2</p> <p>number 4:19 15:3,8 31:21 32:15 34:24 37:2 47:13,17 50:6 63:22 74:12 76:19 82:7 84:13 90:18 91:17 100:8</p> <p>numbers 19:20,21 23:4,8,12 24:16 26:9,21 27:7 32:8 34:8 45:3 47:9,19 56:4 57:15 63:10 74:14 82:1 99:5 100:14</p> <p>numerous 61:24</p> <p>nurseries 84:7</p> <p>nutrient 55:1</p> <p>nutrition 78:21</p> <hr/> <p style="text-align: center;">O</p> <hr/> <p>objective 57:16</p> <p>obligation 3:15</p> <p>obliteration 71:13</p> <p>Observation 18:15 27:12</p> <p>observing 46:16</p> <p>obvious 21:13</p> <p>Ocala 85:2</p>	<p>occurred 21:8</p> <p>ocean 29:24 55:17 98:25</p> <p>oceans 36:6</p> <p>October 99:20</p> <p>odd 94:3</p> <p>offer 21:20 62:3 67:15 98:7</p> <p>office 4:2,5,10,18</p> <p>officer 46:11 48:6</p> <p>offices 57:24</p> <p>official 38:6</p> <p>officially 38:7</p> <p>officials 17:21 64:12</p> <p>offloading 42:10</p> <p>offspring 65:22</p> <p>oldtimers 102:24</p> <p>ongoing 13:7 14:22 44:10</p> <p>open 14:4 39:21 47:8</p> <p>opening 39:17 94:13</p> <p>operated 91:13</p> <p>operates 13:20</p> <p>operating 13:21</p> <p>operator 13:19</p> <p>opinion 43:18 48:5 58:15 71:14 97:11</p> <p>opportunities 17:10</p> <p>opportunity 5:13, 17 6:12 26:19 27:24 38:21 39:21,22 48:1 56:22 65:21 70:2 75:9</p> <p>opposed 46:8</p> <p>opposite 35:19 58:13 88:18 98:18</p> <p>opposition 52:14</p> <p>optimistic 45:1</p> <p>oral 9:1,12</p> <p>Orange 4:19</p>	<p>order 3:9,17 5:3,12 39:22 76:8</p> <p>ordinances 68:18</p> <p>organiza- 101:5</p> <p>organization 38:23, 24 39:1,4 90:2 95:15 101:4</p> <p>organizations 41:22 97:19</p> <p>organize 96:4</p> <p>originally 96:24</p> <p>Orlando 54:19 71:7 79:8</p> <p>outbreak 47:15 81:17</p> <p>outbreaks 21:21</p> <p>outdated 67:17,24 80:18</p> <p>outdoors 95:11 96:19 97:25</p> <p>outfalls 52:24</p> <p>outnumbered 26:15,16</p> <p>outstanding 37:12</p> <p>overexploitation 59:23</p> <p>overlay 29:8</p> <p>overpopulation 94:1</p> <p>overreach 66:15,25</p> <p>overutilization 12:11</p> <p>overwhelmed 102:17</p> <p>owned 102:11</p> <hr/> <p style="text-align: center;">P</p> <hr/> <p>p.m. 3:4</p> <p>paddling 34:14</p> <p>pain 35:1,12</p> <p>panel 3:23</p>
---	--	--	--	---

Park 86:9,11	perfect 18:24 70:2	plea 89:13	68:7 69:2,25 72:3 73:7 74:17,18 76:14 78:22 79:25 80:6 82:3 84:19 86:23 90:17,21 91:16 100:3	prepared 38:5
parks 66:17	peril 32:14 34:10	pleading 101:10		preparing 38:8
part 30:19 54:6,7 73:17 74:3 76:18 85:17	perils 22:2 75:16	pleased 27:16		present 12:9 81:12 87:5
partners 14:8	period 5:8 28:6 39:18 44:25 47:12 67:14 76:10	plenty 27:4 93:11		presentation 5:6 9:19 22:24
parts 5:4	permanently 77:8	poached 56:6	population's 34:4	preserve 36:25 97:22
party 3:14	person 3:20 8:15,16 63:6 69:24	poaching 59:23 70:8	portal 4:21 9:7	preserving 81:2
pass 14:5 57:4,22	perspective 31:18 94:12 97:3	podium 8:1,6,16,18, 20,21,22 18:2,4 22:17	portion 11:17,25 17:18 52:19 59:4,11 61:11	president 89:25
passionate 96:11,17	pet 40:23	point 15:3 32:4,10 37:9 55:24 66:19 90:8	position 38:18 42:7 75:18	press 68:11
past 31:23 34:3 44:8, 12 53:16 65:16 87:5	petitions 25:5	points 13:12 67:15 78:5 98:15 100:22	positive 15:14	pressure 21:15 22:6
Pat 35:25 36:1	Phillis 41:13,14,15	poisoning 86:16	possibility 15:17 77:4	pretend 89:6
path 11:12	phone 78:20	Policy 69:3	possibly 83:12	pretty 30:25 73:2 94:7
Patrick 38:1,2	phones 3:10	political 20:20 22:7 64:11	posted 4:21	prevail 44:10
patterns 49:12	pick 45:12	politicians 72:7	postpone 82:15	prevent 6:22 85:11
pause 101:23	picture 14:9	politics 64:9	pounds 84:8	previous 7:18 78:8 101:6
payer 76:7	pictures 81:24	poll 64:11	power 13:4 21:19 52:24 63:9,10 68:6 82:14,17,18 86:11, 12 95:10	previously 75:5
PBAS 28:8	Pierce 18:14 27:12	Pollock 93:7,8,9	powerboat 93:10	pride 62:14,15
peaceful 18:20	place 13:8 25:20 27:19 28:15,18,19 29:3 35:1 57:6 69:15,19 85:9,11 86:23 90:10 94:10	pollutants 52:2	powerboater 93:10	primarily 14:14
Pelican 18:13	plan 24:21 34:5 41:24 51:7 53:23 54:2 76:2 80:18,22, 25 81:4 82:19,20	polluted 20:2	powerboats 42:11	primary 13:13 60:4
pen 65:17	plans 32:19 40:14 47:6	polluting 39:6	powerful 63:9	prior 64:22 65:14
pending 13:3	plant 52:24 61:18 82:14,17,18	pollution 31:7 34:20 56:9 62:7 70:7 74:22 78:22 84:2,5	precautions 56:11	prior 64:22 65:14
people 8:14 16:4 25:16 27:19 30:16 36:7 40:20 41:6 48:19 49:4 58:13 62:5,11 63:1,4 66:14 69:1 72:12 73:1 75:3 77:21 78:7,13 79:3 81:23 88:16 91:10 93:23 94:5 96:11,17, 19 97:3,7,8,15,18,24 99:21 100:4,8,9 102:12,14	plantation 41:5	pool 56:2	predated 68:1	private 46:25 55:14 98:21
percent 15:16 21:10 25:2 31:24 50:13 59:7 67:21 68:6 79:24	planting 77:22	poor 59:18	predation 12:14	problem 14:13 34:16,21 51:19 91:1, 3,5 97:10,13 100:8,9
percentage 60:6 66:2 74:17	plants 13:4 21:19 40:15 61:23 62:2 68:6 86:12	poorer 27:19	predator 101:14	problems 31:8 34:19 56:10 75:8 97:10,12
perception 65:4	plateau 47:10	popular 36:16	predators 19:3 85:19	proceed 8:15 46:14
peregrine 78:9	play 40:23 41:1	population 10:10 15:1,2,17,20 19:20 20:6,16 21:4,11,15 23:17 25:1 27:10 30:13,20 31:11 32:10 34:8 37:1,14 44:4,9,23 45:2,5,11 49:8,22 51:17,21 52:1,6 53:14,18 55:8,10,20,22 56:3,9 59:6 60:16 67:1,22	predatory 73:20	proceeding 5:19,23
			predicts 80:5	process 9:16 17:1 28:24 96:14,15
			pregnant 82:9	processes 16:18
			premature 22:7 23:3 29:21 30:5 31:8 43:19 52:9 60:7 67:13 75:11 80:2	proclaims 47:6
			premise 90:20	produce 65:21
				produced 36:11

<p>producing 26:20</p> <p>productive 74:3</p> <p>professionals 36:18 97:18</p> <p>professor 30:3 90:3</p> <p>program 14:17 83:16,21</p> <p>progress 19:19 20:15,16 33:2,4</p> <p>project 15:12,14 16:18</p> <p>projected 55:10</p> <p>projecting 68:9</p> <p>Projections 47:14</p> <p>projects 15:16 16:18</p> <p>proof 47:12</p> <p>prop 94:21</p> <p>propeller 35:1,3</p> <p>propellers 85:12</p> <p>properly 4:12</p> <p>property 46:24,25 62:19</p> <p>proposal 9:22 17:3 20:18 22:4,13 28:10 33:8 47:3 52:14 58:24 67:11 68:12, 22</p> <p>proposals 67:16 83:17</p> <p>propose 64:20 97:21</p> <p>proposed 3:6 5:7 38:9 39:2 64:23 87:25</p> <p>proposing 15:25 16:3</p> <p>props 94:18</p> <p>protect 26:3 30:24 34:6 36:15 46:23,24 53:8 57:12 58:8 62:1 71:17 74:2 76:3 79:21 85:14 95:16 96:17 101:14</p> <p>protected 63:20</p>	<p>97:16</p> <p>protecting 25:18 27:20 29:22 43:2,17</p> <p>protection 10:20 13:10,24 16:10,13 21:20 28:12 29:3,14 35:22 42:8 47:11 49:24 60:1 62:2 73:23,24 76:2 81:7 88:8,10,19</p> <p>protections 22:10 27:25 28:13 36:25 53:7 57:5 60:3 65:2, 16 68:13,16,18 69:6, 14,19 73:14 74:13 77:18 88:17</p> <p>protective 85:9 86:22</p> <p>proud 98:7</p> <p>proven 14:18 80:24</p> <p>provide 17:2 26:19</p> <p>providing 37:16</p> <p>public 3:6,9,14 4:11, 14 5:8,10 6:7 7:21 8:2 9:12 17:2,19 36:13 38:11 39:21, 22,23 56:22 58:12 65:3 72:7 83:18 85:14</p> <p>public-paid 36:18</p> <p>publication 36:11</p> <p>publicly 47:5</p> <p>Puerto 11:5 15:10</p> <p>pure 83:3</p> <p>purpose 32:6</p> <p>purposes 12:13 66:12,24</p> <p>pursuing 83:16</p> <p>put 13:8 16:5 24:3 38:17 39:16 57:5 73:24 88:14 97:21</p> <p>puts 45:16</p> <p>putting 63:18 94:20</p>	<p style="text-align: center;">Q</p> <p>qualify 73:9</p> <p>quality 39:8 46:1 51:6 59:18</p> <p>question 6:3,4,7 41:1 69:12 87:6,7</p> <p>question-and-answer 36:10</p> <p>questionable 49:24</p> <p>questioning 23:22</p> <p>questions 6:5 16:2 50:17 64:22</p> <p>quick 64:7 69:11 100:21</p> <p>quickly 42:11 44:15 49:7</p> <p>quote 47:4</p> <p>quotes 33:1</p> <p style="text-align: center;">R</p> <p>R-e-a-l-e 78:4</p> <p>raised 79:9</p> <p>raising 45:7</p> <p>ran 93:25</p> <p>ranches 66:17</p> <p>random 20:17</p> <p>range 10:8,11,15,23, 25 11:17,25 12:11, 20 15:5,7 52:20 59:5,11,16 60:2,25 61:11 76:18 84:13</p> <p>rapidly 47:19</p> <p>rare 82:10</p> <p>rarely 55:4 102:25</p> <p>rate 45:2</p> <p>rated 57:10</p> <p>rates 52:2 60:17</p> <p>reached 47:9 63:23</p> <p>reaches 23:15</p>	<p>reaction 95:25</p> <p>read 83:4</p> <p>ready 9:19 72:10</p> <p>real 87:13</p> <p>Reale 75:21 78:1,3</p> <p>realistic 55:24</p> <p>realistically 66:7</p> <p>reality 20:22 29:13, 14 55:5 69:6</p> <p>realize 63:4 72:18</p> <p>reason 61:25 86:3 95:17</p> <p>reasonable 35:17 56:10</p> <p>reasons 87:12</p> <p>rebuttals 5:22</p> <p>receive 99:25</p> <p>received 9:13 99:15</p> <p>receiving 99:21,23</p> <p>recent 26:8,14 36:8 43:7 44:19 45:25 51:12,14 60:14 68:1 71:23 80:15</p> <p>recently 11:18 32:3 39:7 43:10 87:24 90:22</p> <p>reception 45:14</p> <p>recession 32:2</p> <p>reckless 73:22</p> <p>reclassification 5:7 16:4 36:12 38:9 52:16 57:3 60:8</p> <p>reclassified 36:24</p> <p>reclassify 3:7 9:22 17:3 58:24 96:15</p> <p>reclassifying 38:25 76:24</p> <p>Recognizing 37:14</p> <p>recommendation 38:14</p> <p>recommendations 5:18</p>	<p>recommended 54:1 76:24</p> <p>record 4:14 5:19 6:24 32:1 38:18 39:16 43:11 49:8 67:20 69:12</p> <p>recorded 4:12 5:14 6:24 79:25</p> <p>records 43:10</p> <p>recover 19:20 81:22</p> <p>recovered 31:12 53:18 77:10</p> <p>recovers 54:8</p> <p>recovery 4:6,8 12:3 27:2 32:22 33:6 34:4 42:15,19,22 45:21 53:23,24,25 80:18, 21,22 81:3,4</p> <p>recreational 12:12</p> <p>red 8:1,4 20:8 21:21 27:1 28:24 31:10 32:12 34:19 43:11 47:15 51:13 56:9 61:5 62:9 70:5 74:15 75:17 81:17</p> <p>reduce 53:7 73:12 94:16</p> <p>reduced 44:5,6,10 59:18 60:3 65:6 73:16 80:15 89:17</p> <p>reducing 13:14 80:25 81:1</p> <p>refer 4:24</p> <p>refrain 6:21</p> <p>refuge 62:3</p> <p>refugees 89:19</p> <p>refuges 21:18 47:18 86:22 89:19</p> <p>regard 35:11</p> <p>Regional 4:8</p> <p>regions 68:3</p> <p>register 7:10 101:18,21</p> <p>registered 7:8,9,11, 5:18</p>
--	--	--	---	--

<p>16 26:24 48:11,22 101:17</p> <p>registration 5:1 7:11,13 9:11 101:22</p> <p>Registry 4:22,24 28:20</p> <p>regs 83:23</p> <p>regular 71:6</p> <p>regulation 68:23</p> <p>regulations 26:3 39:2 65:9,14 68:17</p> <p>regulatory 12:15 29:3 59:13 83:20</p> <p>rein 100:5,6</p> <p>reinstate 54:1</p> <p>reinstating 53:24</p> <p>relative 45:23</p> <p>relaxed 65:14</p> <p>release 68:11 82:14, 15</p> <p>reliable 56:5 64:24 67:18</p> <p>relied 21:3 38:13</p> <p>relies 60:12</p> <p>relisting 84:16</p> <p>relocate 82:19</p> <p>rely 73:14</p> <p>remain 12:2 14:4 16:8,10,14,19 28:15, 18,19 35:18 47:13 60:19 69:15 80:9 99:17,24</p> <p>remains 19:22</p> <p>remarkably 14:6</p> <p>remarks 6:21</p> <p>remember 23:13 70:20</p> <p>remind 43:1,3</p> <p>reminded 18:5</p> <p>reminder 43:6</p> <p>removal 47:18 69:5</p>	<p>remove 47:10 69:17 77:5</p> <p>removed 36:24 39:3 77:19 78:10</p> <p>removing 46:9 88:17</p> <p>repeat 7:20</p> <p>replace 23:8</p> <p>report 44:3 65:24</p> <p>reported 6:9 48:23 65:13</p> <p>reporter 4:13 5:21 8:25 22:19 102:4</p> <p>represent 55:5</p> <p>representatives 17:21 36:20</p> <p>represented 69:13</p> <p>representing 67:10</p> <p>reproduction 66:4</p> <p>reproductive 18:23</p> <p>request 38:7,11,14, 16 39:20</p> <p>requests 38:6</p> <p>required 60:10</p> <p>requirements 59:1, 13</p> <p>requires 12:6</p> <p>requiring 66:19</p> <p>rescue 14:17 76:8</p> <p>rescued 42:20</p> <p>rescuing 42:15</p> <p>research 67:19 71:16 76:7</p> <p>reside 37:23</p> <p>resident 20:14 36:3 75:24 92:10</p> <p>residential 87:17</p> <p>residents 42:24 98:6</p> <p>resounding 55:2</p> <p>resource 83:20</p>	<p>resources 37:20 53:11 77:11</p> <p>respect 6:16,17 7:6 89:16</p> <p>response 17:24 80:4</p> <p>responsibilities 22:1</p> <p>responsibility 34:2 70:11,12 74:1</p> <p>rest 27:18 30:15 39:17 65:8 84:5 86:17</p> <p>restore 14:9 37:15 73:6 77:23</p> <p>restoring 14:12 37:4</p> <p>restrict 96:1,2</p> <p>restricted 13:11,13</p> <p>restriction 12:9</p> <p>restrictions 68:24</p> <p>result 6:19 46:16 68:5 98:4,5</p> <p>results 32:7</p> <p>retirees 77:20</p> <p>returning 14:19</p> <p>revealing 21:12</p> <p>review 12:18 45:6 68:24</p> <p>reviews 77:9</p> <p>rhetoric 83:4</p> <p>rich 18:21</p> <p>Richard 85:22</p> <p>Rico 11:5 15:10</p> <p>rid 47:6</p> <p>ridden 19:7</p> <p>ridicule 6:13</p> <p>ridiculous 58:9</p> <p>rise 60:5 69:3 80:13, 16</p> <p>rising 55:1</p> <p>risk 35:16 73:25 90:4,7,8,9,11,13,14,</p>	<p>15,16</p> <p>risks 71:20,22,24 72:19</p> <p>River 11:2 30:18 31:6 36:3 37:3,7 38:22 40:12 41:19 46:1 66:9 75:24 77:17 86:9 92:12,22, 23 102:16,20</p> <p>River/kings 37:8</p> <p>rivers 20:2</p> <p>roadmap 53:20</p> <p>roads 48:19,20</p> <p>roadway 48:7</p> <p>Robert 33:19 35:24</p> <p>Rollins 30:4 31:16</p> <p>room 62:12 79:6 81:23 89:14 95:1 96:9</p> <p>ropes 40:25</p> <p>Rose 36:1 38:1,2</p> <p>Rosetti 41:13,14,15</p> <p>rules 5:5,9,10,11 9:17,18 10:18 24:1 53:8</p> <p>ruling 65:15</p> <p>run 96:4</p> <p>runoff 74:22</p> <p>runoffs 52:4</p> <p>runs 15:11</p> <p>rush 41:1 93:1</p> <hr/> <p style="text-align: center;">S</p> <hr/> <p>S&p 31:23,24</p> <p>S-a-r-a-n-g-i 49:17</p> <p>S-h-e-a-r-e-r 61:15</p> <p>S-i-r-y 29:23</p> <p>S-o-r-b-o 31:15</p> <p>sadly 34:16 40:24</p> <p>safe 86:6,14,18</p>	<p>safer 78:20 86:23</p> <p>safety 46:18 49:22</p> <p>sail 95:9</p> <p>sailboat 36:4</p> <p>sailboater 25:15</p> <p>sailor 83:10</p> <p>sales 62:6</p> <p>sanctuaries 16:14 40:19 89:20</p> <p>Sandra 43:21,22 46:4</p> <p>Sarang 47:24 49:16,17</p> <p>Sarasota 100:24,25</p> <p>Saturday 3:4</p> <p>save 18:12 30:1 37:3 38:4,22 51:2 52:12 54:5 58:23 64:15 70:19 74:8 75:12,17 77:17 79:7,21 83:15</p> <p>Saving 46:15</p> <p>scar 49:12</p> <p>scars 93:16,17 94:15</p> <p>scenario 69:13</p> <p>science 20:20,21 52:12 60:21 61:10 67:18 72:14 83:3 95:24 96:5 99:3 102:21</p> <p>scientific 12:12 21:4 36:16 39:13 44:19 60:9 76:12 78:7 89:11</p> <p>scientifically 37:21</p> <p>scientist 56:18 88:25 91:8</p> <p>scorecard 57:10</p> <p>screen 5:2 9:9</p> <p>sea 10:9 41:22 52:25 55:1</p> <p>seagrass 18:21 21:22 27:2 31:5 34:15,20 84:1,8</p>
---	---	---	---	--

Formal Public Hearing of United States Fish and Wildlife Service
 STATUS OF THE WEST INDIAN MANATEE, PROPOSED ACTION TO RECLASSIFY THE Seagrasses..Stacy

<p>90:19,23 97:14</p> <p>seagrasses 84:15</p> <p>search 99:19</p> <p>season 47:8 61:21</p> <p>seat 18:4</p> <p>seated 18:4</p> <p>second-generation 71:2</p> <p>seconds 7:22 8:3</p> <p>secure 48:3 54:4,9, 12 56:11 82:2,21</p> <p>sees 97:7</p> <p>selfish 66:12</p> <p>selfishness 35:3</p> <p>semantics 29:13</p> <p>Senators 17:20</p> <p>send 17:15</p> <p>sending 72:6,8</p> <p>senior 4:7 90:4</p> <p>sense 14:4</p> <p>sentence 8:10,11</p> <p>sentient 62:14</p> <p>Sentinel 99:20</p> <p>separated 73:19 75:1</p> <p>septic 52:3</p> <p>serenely 18:25</p> <p>service 3:13,17 4:4, 12 6:1,10,15 9:4,8, 14,15 12:7 20:24 22:12 28:16 29:4 32:16 33:1,5 36:11, 13,15 38:8 44:2,18 52:15 53:9,21 54:3 59:6,12 60:12,14 61:7 68:2,4,11,21 71:11 72:5 76:22 80:5,20,23 81:19 85:7 86:20 89:9,14</p> <p>Service's 3:5 4:1 9:21 40:6 41:24 51:7,11 53:6 58:24 67:24</p>	<p>services 4:1 41:20 42:14</p> <p>session 6:3,4</p> <p>set 7:21 36:1 53:24</p> <p>setting 5:5</p> <p>severely 26:25 42:20</p> <p>sexually 66:5</p> <p>shallow 87:21,23</p> <p>share 18:25</p> <p>sharks 19:1</p> <p>Shearer 61:13,14,15</p> <p>shelter 37:11</p> <p>shifting 72:5</p> <p>ships 42:10 55:16</p> <p>shopping 42:12</p> <p>shore 29:24 41:23 95:18,19 96:1</p> <p>shoreline 46:24 87:24</p> <p>short 5:6</p> <p>shortsighted 27:21</p> <p>shot 19:5</p> <p>show 19:1 27:16 32:7 33:4,16 68:4 87:10 89:6,12</p> <p>showcase 32:7</p> <p>showing 63:15 97:5</p> <p>shown 96:6</p> <p>shows 10:23 75:6</p> <p>shut 86:12</p> <p>shuts 82:18</p> <p>shutting 61:18 62:2</p> <p>shuttle 90:6</p> <p>sickening 35:3</p> <p>side 91:7</p> <p>sides 73:8</p> <p>sign 87:19</p> <p>significant 11:16,25 12:20,24 13:1 15:3,</p>	<p>11 32:23 33:2,3 47:16 52:19 57:17 59:4,11 61:11 76:18 93:16</p> <p>significantly 12:23 60:25 85:20</p> <p>silence 3:11</p> <p>Silver 30:24 31:3</p> <p>simple 33:14 53:7</p> <p>simply 16:5 21:25 27:6 32:16</p> <p>single 19:16 53:2</p> <p>Siry 29:17,18,23</p> <p>sister 33:21</p> <p>Sisters 92:11</p> <p>sit 8:17 19:9</p> <p>site 17:16 23:2</p> <p>sitting 35:8 97:19</p> <p>situations 91:2</p> <p>size 74:11</p> <p>skiers 92:20</p> <p>skin 74:11</p> <p>slap 70:16</p> <p>slides 91:15</p> <p>slow 13:15,20 18:23, 24 46:22 58:4,7 65:6 92:2</p> <p>slow-moving 13:18</p> <p>slow-reproducing 43:3</p> <p>slow-speed 47:6 58:5</p> <p>slowly 26:20</p> <p>small 64:13 66:9</p> <p>smallest 30:18</p> <p>smashing 35:9</p> <p>Smith 65:13</p> <p>Smyrna 20:14</p> <p>snap 20:7 70:4</p> <p>snaps 56:8</p>	<p>snapshot 100:21</p> <p>snowbirds 37:6</p> <p>society 18:13 31:10 49:23 57:9 67:10 96:3</p> <p>solution 41:7 54:6 94:17 97:20</p> <p>solutions 97:23</p> <p>solves 54:8</p> <p>solving 54:13</p> <p>Somerset 95:3,5,6,7</p> <p>Sorbo 29:17 31:14, 15 33:11,19,20,21</p> <p>sort 38:20 57:16</p> <p>sorts 62:8</p> <p>sources 59:20 75:3</p> <p>south 10:9 11:10 34:13 40:13 56:4 58:18</p> <p>southeastern 10:8 11:7 15:9 16:22 80:6</p> <p>southwest 68:3</p> <p>space 86:13 90:5</p> <p>speak 3:21 5:13 7:8, 9,12,16,17,18 8:8,22 17:23 18:10 33:24 36:2 48:2 85:5 100:21 101:19</p> <p>speaker 5:1,12 7:10, 13,19 8:17,19,20 9:10 18:3 101:21</p> <p>speakers 3:19 7:2 8:9 101:17</p> <p>speaking 8:8 23:5 30:3 85:4</p> <p>special 10:18 22:6 25:5 26:1 27:22 89:13</p> <p>species 9:24 10:1,2, 15 11:13,14,15,20, 22,23 12:1,5 15:4, 22,25 16:9 21:3 22:3 25:23 32:22,23 36:14,15,17 37:5 46:9 47:11 52:17,18</p>	<p>53:17 54:8 59:1,3 61:8 63:8 64:18 67:5 68:8 73:8,11 74:10 76:6,16 77:5,7,8,9, 12,13 79:15 80:17 85:8,17 86:21 94:4 99:11</p> <p>species' 12:10</p> <p>specifically 10:19</p> <p>spectrum 63:18</p> <p>spee 80:17</p> <p>speech 33:23 38:5</p> <p>speed 13:20 16:14 29:8,10 46:22 65:6 68:16,24 69:17 74:25 85:9 86:22 87:9,16,25 88:5,10, 12 92:2,22</p> <p>speeding 42:12 85:12</p> <p>speeds 13:11 25:19 89:18 94:16</p> <p>spell 8:24 22:18</p> <p>spelled 33:22 92:8</p> <p>spelling 64:3</p> <p>spent 33:7 34:14 36:4 58:2 76:8 86:2 90:4</p> <p>spiral 94:9</p> <p>Spivey 38:1 40:3,5</p> <p>spoken 95:4</p> <p>sports 88:1</p> <p>spot 40:17</p> <p>spotty 27:3</p> <p>spring 14:10 31:1 92:11</p> <p>springs 14:9 18:22 20:1 30:25 31:3 56:21 59:16 85:23 86:9</p> <p>St 30:18 45:3</p> <p>stable 30:13 44:4,5</p> <p>Stacy 41:13,17,18</p>
--	---	--	--	---

staff 6:15 7:12 9:4, 10 58:22	step 94:12	submit 9:6 17:10 67:13 69:7	80:1 82:3	tend 13:16
staffing 33:2,7,9	Stephanie 95:3,5,6, 7	submitting 28:5 43:25 92:24	sustainment 33:6	tenuous 20:17
stake 98:22	steps 94:11	subpopulations 30:6,9	Swagatika 47:24 49:16,17	term 59:2 66:20
stakes 45:21	Steven 87:2,3	subspecies 10:5,6,7, 16 11:6 39:15 55:25	swallow 19:25	terms 38:25 39:6,12 57:11 95:23
stance 75:11	stipulated 68:2 77:15	substantial 58:2	swim 56:23 102:12	terrible 20:9
stand 46:8 58:14 75:11,17 83:13	stolen 20:1	succeed 53:15	swimmers 40:20,23	Terry 18:8 20:13
standing 71:12	stones 75:6	success 96:6	synoptic 45:9 50:5	theoretically 47:1
standstill 30:12	stop 45:24 53:21 71:10	successful 14:6,18 73:6	system 73:18	thermal 84:2,5
start 5:9 33:23 35:24 53:22 65:8 81:13	stork 36:23	suffer 19:10 86:13	T	thin 74:11
started 42:17 102:13,23	story 19:21 96:6	succinct 17:4	table 7:11,13 9:11 44:13,17 101:22	thing 24:5 29:9 49:25 61:22 62:16, 25 70:9 71:12 73:5 75:8 80:11 88:17 91:4,24
state 4:1 8:23 10:17 14:8 17:22 19:17 22:9,17 23:2 24:10 28:17,21 29:8 30:6, 17 34:15 39:2 53:10 57:12,15 58:13 60:3 61:24 63:23 66:17 67:20 68:3,17 69:4 76:1 77:18 79:10 83:8,25 86:9 87:19, 25 98:10	straight 87:23	summarized 73:2	tables 5:1	things 14:20 16:25 26:2 62:8 67:4 72:15 78:18,23 86:5,16 93:18
state's 67:22 68:7 94:14	straighten 92:21	Sun 99:20	taking 8:9 62:1 95:8 98:2,9,17	thinking 20:25
stated 9:17 31:9 68:12 71:19,25	straits 91:22	Supervisor 4:1,4	talk 5:15 20:21 38:21 49:7 64:6 71:16 88:16 94:5 96:11	thinks 98:16
statement 53:6	strategies 18:24	supply 32:14	talked 102:24	thought 42:24 91:16
states 10:9 11:7 13:1 14:17,21 15:10,15 16:22 30:1 66:13 67:11	strategy 13:14	support 21:1 24:13, 21 39:13 40:6 41:24 51:7,25 54:21 57:18 85:4	talking 23:6,24 51:22 61:17 94:3,19	thoughts 5:18
statistics 48:8 50:3, 10,14,20 65:12,24	street 63:6	surely 32:6	Tamison 54:16	thousand 69:1
stats 94:10	stress 43:8	surprised 93:22	Tampa 49:20 54:19 89:7 100:18	thousands 40:16
status 3:7 9:23 12:4 14:23 16:1,5,6 24:11 28:15 30:23 34:7 47:22 67:12 68:19 72:6,17 73:9,15 76:25 94:7	stressed 42:20	survey 45:8 50:5	target 30:17	threat 12:20,24 13:14 21:24 27:2
stay 3:19 69:19 83:12	strides 43:2	surveys 45:9 88:2	Task 54:1	threatened 3:8 9:24 10:2 11:22,25 12:9 16:1,8 24:4,22 34:7 40:7 42:1 51:8 59:15,17,22 63:7,20 64:19 67:12 76:25 77:6 78:16 79:2,14
stays 97:12	strikes 19:14 62:9, 10 75:17	survival 26:22 27:22 34:12 35:16 59:17 60:5,17 70:12 80:3	tax 76:7	threatening 50:16
	striking 35:4 92:19	survive 20:7 63:3	teach 42:4	threatens 20:18
	striving 37:17	susceptibility 59:25	tangle 27:5	threats 12:2,6,18 13:2 14:25 15:19 21:13,17,18,21,22 26:22 27:24 32:23 34:11 35:17 44:4,5, 11,15 51:20 55:20 60:3,5,6,19,21 61:8 70:6,9 73:7,9,13,15 80:9,12 99:17,23,24,
	strong 34:5 35:22	sustainability 37:1	tank 90:5	
	struck 13:17 35:5	sustainable 32:10 44:22 51:11 63:23	tanks 52:3	
	structures 13:25 14:1,2,3		teacher 100:19,21	
	students 91:11		teachers 77:21	
	studied 41:23		team 33:6 53:24 54:7 80:18,21	
	studies 30:5 54:24 73:1 83:25 84:12		teams 53:25	
	study 29:25 49:18 54:20 63:17 76:12 84:17 87:14 90:22		telling 17:5 63:1	
	subject 36:12		ten 26:18	
	submerged 37:10			

<p>25 100:1</p> <p>threshold 47:20</p> <p>thriving 77:14</p> <p>tide 20:8 21:21 27:1 31:10 32:12 34:19 43:12 47:15 51:13 56:9 61:6 70:5 74:15 75:17 81:17</p> <p>time 3:10,19 7:21,24 8:5,7,8,9,14 13:9,16 18:1,5 20:11 22:7 23:22 24:11,18 32:17 42:1 43:24 44:16 46:12 56:11 58:3 64:5,17 67:22 69:21 70:19 71:15, 21 74:18 76:10 77:16 81:22 85:24 89:21 93:1 95:8 101:19</p> <p>timer 7:24 18:7</p> <p>times 37:2 42:2</p> <p>timid 7:3</p> <p>tirelessly 37:15</p> <p>today 3:21 6:5,15 7:23 9:21 17:2 18:10 29:19 32:17 40:1 52:13 56:17 58:15 60:11 69:24 81:10 82:21 83:5,14 88:16 89:7 92:9 93:20 94:5 95:8 97:9 99:15 102:3,7</p> <p>told 81:15</p> <p>tonight 9:1,5 101:18</p> <p>tonight's 17:19</p> <p>tons 84:7</p> <p>top 42:7</p> <p>topics 22:25</p> <p>total 69:22 80:7 82:8 84:21</p> <p>totality 66:21</p> <p>touched 41:9</p> <p>touring 43:14</p> <p>tourist 85:19 96:25</p>	<p>tourists 92:16 98:6</p> <p>towns 42:12</p> <p>toxic 32:20</p> <p>toxins 20:3</p> <p>traffic 48:7,13,16,21 86:15</p> <p>tragedy 70:3</p> <p>train 40:16</p> <p>transcript 4:15,16, 20 6:8 22:20</p> <p>traps 14:15</p> <p>trash 20:3</p> <p>travel 92:2</p> <p>travelers 42:10</p> <p>treasurer 30:1</p> <p>treat 89:14</p> <p>trend 63:15,16</p> <p>trends 25:1 59:6</p> <p>Trevor 29:17 31:14 33:11</p> <p>Trevor's 33:21</p> <p>Tripp 50:24 52:11, 12</p> <p>trivia 79:9</p> <p>trouble 102:4</p> <p>true 35:19 77:19</p> <p>trust 57:8</p> <p>truth 20:5</p> <p>turn 66:16</p> <p>turned 33:11 39:7</p> <p>turnout 7:23</p> <p>turns 16:12</p> <p>twins 82:9,11</p> <hr/> <p style="text-align: center;">U</p> <hr/> <p>U.s 12:22</p> <p>U.S. 12:25 17:11,17 18:16 28:16 41:20 44:2,18 60:2 76:22</p>	<p>80:6 83:6 85:6 86:19</p> <p>ugly 22:8</p> <p>ultimate 35:21</p> <p>ultimately 4:15</p> <p>UME 20:8</p> <p>unable 61:1</p> <p>unavailable 59:20</p> <p>unbiased 3:14 36:16</p> <p>unchanged 16:11, 19</p> <p>unclear 24:23</p> <p>under-synoptic 45:8</p> <p>underestimation 71:20 72:18</p> <p>understand 6:25 23:24 25:16 40:12 50:4 51:5 56:6 66:4 74:19 99:10</p> <p>understanding 83:18 94:9</p> <p>undertone 94:2</p> <p>undertones 93:22</p> <p>underwater 18:19</p> <p>underway 28:21</p> <p>undiscovered 75:5</p> <p>unfortunate 93:14</p> <p>UNIDENTIFIED 95:1</p> <p>unintelligible 49:23 65:18,19,20 76:11 82:16 83:13 86:10 93:9 97:6</p> <p>Union 30:7</p> <p>unique 85:17 86:7 97:4</p> <p>United 10:9 11:7 13:1 14:16,21 15:9, 15 16:22 30:1 67:10</p> <p>University 49:19</p> <p>unknowing 73:25</p>	<p>unknown 25:1 59:7</p> <p>unprecedented 72:1</p> <p>unpredictable 61:3</p> <p>unquote 47:4</p> <p>unravel 20:18</p> <p>unscientific 21:4</p> <p>unsolved 22:1</p> <p>unsustainable 44:16</p> <p>update 39:19,20 80:21</p> <p>updated 81:3</p> <p>updating 53:22</p> <p>upper 45:3</p> <p>Upwards 52:23</p> <p>urge 89:9</p> <p>USDS 41:22</p> <p>utilize 39:24</p> <hr/> <p style="text-align: center;">V</p> <hr/> <p>Valade 4:7 5:6 9:19, 20</p> <p>valid 33:9</p> <p>valuable 45:12</p> <p>variety 45:16</p> <p>vary 60:1</p> <p>vast 20:5</p> <p>vegetarian 85:18</p> <p>vegetation 37:10</p> <p>vehicle 48:24</p> <p>vehicles 48:11</p> <p>verge 24:15</p> <p>verify 75:9</p> <p>Vero 4:2</p> <p>vessel 48:24 49:1,4</p> <p>vessels 48:23</p> <p>veto 66:10</p>	<p>viability 21:3</p> <p>viable 65:21 80:25 81:2</p> <p>victims 81:21</p> <p>videos 85:13</p> <p>view 55:24</p> <p>views 40:18</p> <p>vigorous 74:2</p> <p>vilify 6:13</p> <p>Vincent 29:17,18,23</p> <p>violation 38:16</p> <p>virtually 30:11</p> <p>vision 53:17</p> <p>visited 85:22</p> <p>visitors 27:13,15</p> <p>visual 34:15</p> <p>voice 64:13</p> <p>voiceless 71:18</p> <p>volume 32:12</p> <p>voluntary 42:14</p> <p>volunteer 18:16 27:11 41:19 51:2 64:15 74:9 79:7 97:19</p> <p>volunteered 51:3</p> <p>volunteering 46:15</p> <p>volunteers 70:18 89:4</p> <p>voted 66:22 74:24</p> <p>vulnerable 19:22 57:1 74:10</p> <p>vultures 65:5</p> <hr/> <p style="text-align: center;">W</p> <hr/> <p>W-a-r-n-e-r 26:8</p> <p>W-i-g-g-i-n-s 24:10, 21</p> <p>wait 64:21</p> <p>wanted 38:6 54:6,7 89:12</p>
--	---	---	---	---

<p>wanting 25:8 40:6</p> <p>warm 13:3,4 16:23 18:22 20:1 21:18 37:4,16 47:18 52:23 54:1 59:16,19 61:2, 20 81:2 86:13 89:18</p> <p>warm-water 21:20 90:21</p> <p>warming 72:2</p> <p>Warner 26:6,7</p> <p>watch 83:13</p> <p>watched 19:25</p> <p>water 13:3,4,24,25 16:23 19:8 25:17 37:4,16 39:8 42:13 46:1,11 47:18 51:5 52:23 54:1,25 58:3 59:16,18,19 61:2 81:2,11 86:13 87:21 88:1 89:19 100:24 102:15</p> <p>water-related 55:18</p> <p>watercraft 13:5,14 34:24 60:4 70:7 82:8,12 90:12</p> <p>waterfront 16:17</p> <p>waters 18:25 35:15 51:10 55:16 79:24 87:17,20</p> <p>waterway 13:12 37:12 46:24 48:8 83:8</p> <p>waterways 43:6 48:22 74:21 78:13 90:1 95:16</p> <p>ways 71:20 78:19 90:25</p> <p>weaken 22:9</p> <p>weather 45:16 47:16 51:14 61:5</p> <p>Web 17:16 23:1,2</p> <p>Webster 87:2,3</p> <p>week 34:13</p> <p>weeks 42:18 56:21 82:6,13</p>	<p>well-being 35:21</p> <p>well-intentioned 28:17 29:6</p> <p>West 3:7 9:22,25 10:4,5,14,18,24 12:4,18,21 14:23 15:8,13,21,23 16:6 17:3 30:12 41:25 51:7 52:16 55:20 58:25 59:10 76:14</p> <p>whatsoever 35:11</p> <p>whopping 43:11</p> <p>widely 45:17</p> <p>Wieck 22:21,22</p> <p>wife 89:1</p> <p>Wiggins 24:8,9,20</p> <p>wild 11:22 14:20 41:21 66:5 101:2,7,9</p> <p>wildlife 3:5,13,16,25 4:4,12 5:25 6:9,14 9:4,8,14,15 18:17 27:5 28:3,16 38:8 41:4,10,20,21 44:2, 18 58:24 67:19 76:22,23 85:7,18 86:7,19 97:25 98:5 100:18</p> <p>William 94:23,25</p> <p>Williams 3:25 51:23</p> <p>win 98:3</p> <p>wine 57:24</p> <p>winter 21:21 40:11, 17 61:2</p> <p>winters 26:25</p> <p>wishes 3:21 101:18</p> <p>wonderful 27:21 78:7 85:25 101:8</p> <p>wood 36:23</p> <p>woods 71:6</p> <p>words 6:15 28:11 63:10 87:22</p> <p>work 16:24 20:20 27:11 53:5,22 54:5, 9,11,13,24 71:17</p>	<p>80:21 87:10,12 88:5, 12,13 90:24 101:4</p> <p>worked 37:15 54:25 57:7</p> <p>working 14:7 28:6 42:13 49:20 62:12 77:21 81:13,15 83:9 90:20</p> <p>Workman 4:14</p> <p>works 90:8</p> <p>world 18:21 27:14, 18 43:13 97:6,7</p> <p>worse 21:11 52:6 78:23</p> <p>worst 21:24</p> <p>worst-case 69:13</p> <p>worth 62:22 65:25</p> <p>wrap 99:6</p> <p>write 17:12</p> <p>written 4:15,16,20 9:2,7,13 43:25 67:13 69:7</p> <p>wrong 45:19 94:13</p> <hr/> <p style="text-align: center;">Y</p> <hr/> <p>year 23:9 26:12,24 45:14 48:15,24 49:10 50:4 63:14 83:9 99:7,9</p> <p>years 15:18 21:10 23:12,14 26:8,14,18 30:4,24 31:2,23 33:7,11 35:18 36:4 40:21 41:3 42:16 43:7 44:8,13 45:4 46:12 48:21 49:18 50:8,12,13 51:18 53:4 57:6,8 60:14 64:16,24,25 67:3 76:5 78:18,19 80:8, 15 83:14,22 84:21 85:15,24 90:4,11 99:1 101:2 102:11, 25</p> <p>years' 48:5 65:25</p>	<p>yellow 7:25 8:3</p> <p>yesterday 33:12</p> <p>Young 3:3,12 17:18 20:12 22:14 23:18 24:7,19 26:5 28:1 29:16 31:13 33:18 37:25 40:2 41:12,16 43:20 46:3 47:23 49:15 50:23 52:10 54:15 56:13 58:20 61:12 63:25 67:6 69:9 70:23 72:22 74:5 75:13,20 77:25 79:17 81:8 82:23 84:24 87:1 89:22 92:5 93:6 94:22 95:2 96:21 98:19 100:11 101:16,21,24</p> <p>younger 33:21</p> <p>Youngstown 40:5</p> <hr/> <p style="text-align: center;">Z</p> <hr/> <p>zone 58:5</p> <p>zones 13:10 16:14 29:8,9,10 34:25 46:19,22 47:7 65:6 69:17 74:25 85:10 86:22 87:9,16 88:1, 5,10,12</p> <p>zoning 68:17</p>
---	--	---	--