

NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION

+ + + + +

MARINE FISHERIES ADVISORY COMMITTEE

+ + + + +

ADVISORY COMMITTEE MEETING

+ + + + +

WEDNESDAY
OCTOBER 24, 2012

+ + + + +

The Advisory Committee met in the Ellsworth Room, Silver Spring Civic Building, One Veterans Place, Silver Spring, Maryland, at 10:00 a.m., Keith Rizzardi, Chair, presiding.

MEMBERS PRESENT:

KEITH RIZZARDI, St. Thomas University School
of Law, Chair

EDWARD (TED) AMES, Penobscot East Resource
Center

JULIE BONNEY, Alaska Groundfish Data Bank,
Inc.

COLUMBUS H. BROWN, U.S. Fish and Wildlife
Service, Retired

RANDY CATES, Cates International, Inc.

ANTHONY CHATWIN, National Fish and Wildlife
Foundation

PAUL CLAMPITT, F/V Augustine

PATTY DOERR, The Nature Conservancy

PHILLIP J. DYSKOW, Yamaha Marine Group,
Retired

KEN FRANKE, Sportfishing Association of
California

JULIE MORRIS, New College of Florida

GEORGE C. NARDI, GreatBay Aquaculture, LLC

BOB RHEAULT, East Coast Shellfish Growers
Association

DAVE WALLACE, Wallace & Associates

PAM YOCHER, Hubbs-Sea World Research
Institute

CONSULTANT TO MAFAC:

RANDY FISHER, Pacific States Marine
Fisheries Commission

PRESENT FROM NOAA:

ALEXIS GUTIERREZ

DAVID BERNHART

LAUREL BRYANT

SUSAN BUNSICK

LINDA CHAVES

PAIGE DOELLING

RUSSELL DUNN

TIM HANSEN

MARK HOLLIDAY, Designated Federal Official

HEIDI LOVETT

JIM MCCALLUM

EMILY MENASHES

ALAN RISENHOOVER

STAN ROGERS

KATIE SEMON

GINA SHULTZ

JOSH STOLL

BOB TURNER

BOB WILLIAMS

T-A-B-L-E O-F C-O-N-T-E-N-T-S

Vision 2020 v.20

Patty Doerr,
Ad Hoc Work Group Chair6

ESA & JEOPARDY

ESA Section 7 and MSA Introduction

Helen Golde, Director, Office
of Protected Resources.114

Marian MacPherson, Management
and Program Analyst,
Sustainable Fisheries117

Craig Johnson, Protected
Resources Fishery Biologist123

Questions138

PRESENTATION OF CASE STUDIES

Case Study I: 2012 Hawaii longline
shallow set fishery

Lisa Van Atta, Assistant
Regional Administrator for

Protected Resources,
Pacific Islands Region.141

Paul Dalzell, Senior Scientist,
Western Pacific Regional Fishery
Management Council.143

Case Study II: Gulf of Mexico
reef fish fishery

David Bernhart, SER Assistant
Regional Administrator for
Protected Resources196

Kevin Anson, Vice Chair,

Gulf of Mexico Fishery
Management Council.215

Case Study III: Lower Columbia River

Tule Fall Chinook Salmon

by Bob Turner, NWR Assistant

Regional Administrator for

Salmon Management232

By Chuck Tracy

Deputy Director of the

Pacific Council257

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

2 (9:56 a.m.)

3 CHAIR RIZZARDI: Good morning,
4 everybody. Thank you for getting here early
5 for the subcommittee meetings this morning.
6 I know the Budget and Strategic Planning
7 Committee went well. I hope you guys had an
8 equally productive session with the
9 Certification discussion. And I know we're
10 waiting on a few of the last-minute rec
11 fishery people to get in here, but we're going
12 to get started.

13 This morning we're going to have
14 our discussion on Vision 2020. Patty has
15 taken the leadership role in helping edit and
16 compile everybody's comments on that. And
17 thank you to everybody who has pitched in
18 along the way.

19 Based on the edits she's gotten so
20 far, we identified five topics that we're
21 going to cover today. And after we walk
22 through those five if there's need for some

1 more we can tackle that.

2 Minor edits you can just work with
3 Patty and Heidi and get those changed. We
4 don't need to discuss the minor edits that
5 aren't changing the scope and content. But
6 the big five topics are catch shares, ACLs,
7 rec fishing, aquaculture and climate.

8 So over the course of the next
9 couple hours we're going to hone in on those
10 five topics, and I'm going to let Patty lead
11 the team through the discussion. So thanks,
12 Patty.

13 MEMBER DOERR: So first off, thank
14 you to everybody who participated on the ad
15 hoc working group. I think we wouldn't have
16 the document we have without all of your hard
17 work.

18 There was a lot of time put into
19 the revised document, and so thank you,
20 everybody, for participating, abiding by my
21 timelines and providing some great
22 recommendations.

1 For the benefit of the full MAFAC,
2 I wanted to give you a bit, just sort of a
3 quick run-through of what we, the ad hoc
4 working group had done. We took the Vision
5 2020 document that was last approved, I think,
6 four years ago, three years ago, and changed
7 the structure around a little bit so it flowed
8 by program area and talked about trends and
9 recommendations by program area outlined by
10 the budget.

11 And so most of the text started
12 out as the original text. It was just sort of
13 rearranged into the appropriate program area,
14 and then there were a couple of program areas
15 that needed new text including protected
16 resources, habitat. I don't think
17 enforcement, but maybe enforcement.

18 So there was some new language in
19 there, and what you guys have seen via email
20 and what was on the website is the latest
21 version of the document that reflects the
22 latest thinking of the ad hoc working group.

1 So there's some outstanding
2 questions in terms of language in the five
3 areas that Keith highlighted, but what I want
4 to do today is sort of go through the
5 document, only focus on areas where there is
6 disagreement, and they should be in those five
7 areas that Keith mentioned. Nobody else has
8 brought up another area.

9 I trust that everybody has read
10 the document coming into the meeting, and has
11 come prepared for either alternative language
12 if you want to see some changes, any
13 recommended deletions, additions.

14 I have a golden rule when I work
15 on documents like this that if you want to see
16 a language change you have to draft it. Don't
17 ask other people on the committee to try and
18 read your mind and put it down onto paper.

19 So I trust everybody has read it,
20 and as we go through this again we're only
21 going to focus on areas where there's still
22 outstanding topics to discuss.

1 For the timeline for this, so
2 everybody gets a sense of what's going to
3 happen, if we can't come to an agreement on a
4 particular area in a reasonable amount of time
5 and depending how the conversation's going,
6 I'm going to recommend a small working group
7 of folks to either email or sit down over
8 dinner and see if you can figure something
9 out, and then we can talk about it tomorrow
10 morning.

11 We do still have time on the
12 agenda tomorrow morning for this if we need
13 it. I would love to finish up this morning.
14 And then once we are done here with the
15 changes, I will clean it up.

16 I'm going to work with Heidi to
17 make sure some of the background statistics
18 are correct. We're going to work with, I
19 think we're going to use somebody at NOAA to
20 help us with editing just to make sure we are
21 grammatically correct and we have the typos
22 fixed and the citations all look the same.

1 And then I'm going to write up an
2 executive summary that will be used, just a
3 one- or two-pager that will also be the
4 handout for the document. It's just going to
5 outline what is in the document. It will
6 mirror it and therefore should not be any
7 different than the document itself.

8 So that is sort of the overview.
9 Any questions before we dive in? Am I making
10 sense? Okay.

11 Phil's here. Phil, did Ken have
12 to head out?

13 MEMBER DYSKOW: Yes. Ken is up on
14 the Hill carving out borders between Mexico
15 and he won't be here until probably after
16 lunch.

17 MEMBER DOERR: Okay. With the rec
18 fishing stuff depending on how things go, I
19 think I might rely on you and Russ to provide
20 some background on where some of the rec
21 fishing language came from.

22 Okay, so everybody dive in and do

1 some work. Oh, we'll start at the beginning.

2 So as you'll see in the document
3 there are some notes that have initials, P.D.,
4 that's me. I'm going to be drafting the
5 executive summary and the introduction, so
6 folks don't have to worry about that.

7 And all of the edits that were
8 proposed I tried to remember to assign
9 initials to it, to the person who proposed
10 them. It's more as a reminder to those who
11 proposed the changes to speak up and talk
12 about them.

13 I'm sorry, I forgot about the
14 appendix. You will also see if you go down,
15 Heidi, to the next sort of big block of red.
16 One thing that we are going to do to try and
17 make this document more succinct and tighter
18 is to delete the appendices. It has a lot of
19 great background information but might not
20 necessarily be relevant.

21 So I mean it's just sort of open
22 for discussion and at this point in time, but

1 what we did try to do, the members of the ad
2 hoc working group, was to pull up information
3 from the appendices that should be included in
4 the document.

5 So that is sort of what you see
6 here in red, the front appendix at the end
7 there, to sort of provide that context for the
8 trends and findings. So I'm just going to go
9 through this unless people have concerns about
10 what is there. Speak up. Speak now or
11 forever hold your peace kind of scenario.

12 (Off the record comments)

13 MEMBER DOERR: Yes, we're going to
14 go through one at a time. This is just
15 background information about recent landings.
16 Anybody have concerns?

17 Yes, Ted?

18 MEMBER AMES: I didn't get my
19 notes to you. I've been having computer
20 problems and I got them resolved just today.

21 MEMBER DOERR: Okay.

22 MEMBER AMES: In any case, one of

1 the real problems that we have with catch
2 shares is the fishing community in general
3 really doesn't have their ducks in a row in
4 terms of understanding how it functions.

5 And I suggested that catch shares
6 are an economic tool that has led to success
7 in some offshore fisheries but has limited
8 ability to solve ecological problems, and I
9 felt that was needed because using an economic
10 tool to solve ecological problems is pretty
11 tricky. It accomplishes some things but not
12 a lot.

13 MEMBER DOERR: Did you have a
14 specific spot in which you had --

15 MEMBER AMES: Yes. Following the
16 last sentence, and I had it after ecosystems,
17 implementation. Yes, I --

18 MEMBER DOERR: If you can read
19 that again Heidi can type it in and then
20 everybody will be able to see it.

21 MEMBER AMES: Oh sure. I have it
22 on a thumb drive if that would be any help.

1 MEMBER DOERR: I think it might be
2 quicker at this point if you read it. If it's
3 just a sentence or two, if you read it out
4 loud --

5 MEMBER AMES: It's just one
6 sentence. Catch shares are an economic tool
7 that has led to success in --

8 (Off microphone discussion)

9 MEMBER AMES: -- has led to
10 success in some offshore fisheries, but has
11 limited ability to solve ecological problems.

12 (Off microphone discussion)

13 MEMBER AMES: That's it.

14 MEMBER DOERR: Julie?

15 MEMBER BONNEY: Ted, give us an
16 example, please.

17 MEMBER AMES: Gulf of Maine is
18 just digesting this whole catch share
19 business. And truly, if there was an area
20 that needed consolidation among the larger
21 scale fleet we're one of them, because we had
22 the collapse of our Canadian, access to

1 Canadian fisheries that really has flattened
2 stocks. What has happened is we have had a
3 very rapid consolidation of the coastal fleet
4 and they've virtually disappeared.

5 From the early '90s where you had
6 over 5,000 owner-operator, small scale
7 vessels, boats 50 feet or less, today you only
8 have between 200 and 300 in all of New
9 England. At the same time you have an
10 industrial fleet that measured somewhere at
11 that same time of about 250 to 300 boats, and
12 today you have basically the same number.

13 Now the quantity of fish share is
14 really the issue here. Those 5,000 boats were
15 a real small community, fishing community
16 economic engine. It provided equipment and
17 materials, but it only accounted for 15
18 percent of the total landings in the
19 groundfish fishery. That has virtually been
20 eliminated.

21 And in Eastern Maine in particular
22 it has ended up with local depletions that

1 extend for about 150 miles, where your
2 predator species such as cod and haddock have
3 disappeared today. Even though haddock are
4 recovered on Georges and Western Gulf of
5 Maine, they continue to be collapsed in this
6 incredibly large portion of the Gulf of Maine.

7 Communities have lost access
8 rights. The area that we work in at Penobscot
9 East, primarily, we have 60 fishing
10 communities all of them smaller scale and
11 about 3,000 full-time commercial fishermen
12 operating there.

13 And there are no groundfish,
14 active groundfish permits left. There is
15 virtually no quota available to that entire
16 area. And historically that was a coastal
17 shelf fishery for, oh, probably 150 to 250
18 fishermen. Most of those communities had a
19 few boats that participated.

20 So basically what is happening for
21 coastal fishermen is that they have lost
22 access rights. Now this sounds oblique, but

1 what is missing is, the economic problem or
2 the problem of large scale fishing damaging
3 the fishery and TACs and quotas and the rest
4 is a critical issue. It's needed to be done.

5 In Gulf of Maine it hasn't been
6 done in a way that addresses the ecological
7 problems that have caused the collapse of
8 these fish stocks for such a large area. Some
9 people say it's global warming, yet where
10 approximately 200 miles north of Georges Bank
11 and Mass Bay where there still are these
12 species in incredible abundance.

13 So we need somehow to make people
14 aware that catch shares isn't a solution to
15 all problems. That there are ecological
16 realities that need to be addressed too.

17 So I felt simply putting a
18 statement and saying that it didn't address
19 the ecological problems would broaden the
20 perception for perhaps the Council or NOAA
21 down the way.

22 MEMBER WALLACE: Well, I

1 understand what Ted said. I'm not sure that
2 this sentence addresses that issue because the
3 lack of fish was not necessarily the, caused
4 by no fishing by the people from Downeast
5 Maine.

6 But the fact is that if the
7 fishery has a fixed quota that is below MSY
8 and there are no other, and their size limits
9 and what have you, then the catch shares
10 within themselves have no effect on the
11 ecological structure of a fishery.

12 And so, you know, while I don't
13 really object to the sentence, you know, I
14 don't think that it really fits in. As a
15 principle I don't object to the sentence. I
16 don't know how it really fits into catch
17 shares.

18 Catch shares is a completely
19 different issue than the ecological, and if
20 they hadn't overfished the stocks in the Gulf
21 of Maine and there hadn't been some ecological
22 changes in the Gulf of Maine there would still

1 be some fish in the eastern area of Maine, but
2 it was never a huge fishery. By Ted's own
3 admission it was only 15 percent of the total
4 fishery.

5 So I just see that as an
6 interesting statement that I would probably
7 put somewhere else, and it really needs a
8 whole paragraph if you're going to try to
9 explain it. Thank you.

10 MEMBER AMES: I have no problem
11 with that. The issue I'm trying to get at is
12 the species that are of value in the
13 groundfish industry in eastern Maine and
14 actually throughout New England are, they are
15 stocks which reproduce, ensure, their nursery
16 stages and juvenile stages are, ensure, and
17 the harvest of them conducted by large vessels
18 has extirpated those species from credible
19 sections of the coast.

20 It's not the fault of fishermen.
21 Good businessmen have said, well, this is a
22 35,000 square mile area that we can exploit if

1 we have the right size vessel. And they did.

2 And there are others which are the
3 traditional coastal fishery, which is the
4 basis of coastal economics particularly for
5 rural Maine, has basically been put out of
6 business, eliminated from that fishery and
7 others simply because the system has been
8 degraded, because the scale of the fishing
9 effort that is occurring there or that used to
10 occur there is the wrong size.

11 And if you use catch shares as a
12 cure-all as it's generally perceived by the
13 fishing community today you miss the whole
14 dynamic of what's going on. The reality is 50
15 percent of the Gulf of Maine has no groundfish
16 whatsoever.

17 The fishery is limited to maybe a
18 half a dozen boats that continue to fish at a
19 small scale in mid-coast Maine, but you have
20 to go basically to Portland before you have a
21 significant number of boats left.

22 It's an ecological problem that

1 needs to be addressed. I thought this was a
2 way to start teasing it out.

3 CHAIR RIZZARDI: So I'm just going
4 to try to offer some language that I think
5 enhances what Ted has offered. On the "but"
6 clause it would say, "but catch share
7 implementation can be undermined by
8 independent ecological problems such as
9 fishery stock declines associated with
10 changing ocean conditions," so it gives an
11 example of what you're talking about.

12 It preserves the point, which is
13 catch shares can be successful but they,
14 independent ecological problems can --

15 MEMBER AMES: I think if you say
16 "independent ecological problems" is better
17 than your earlier --

18 CHAIR RIZZARDI: My full phrase
19 was, "but catch share implementation can be
20 undermined by independent ecological problems
21 such as fishery stock declines associated with
22 changing ocean conditions."

1 MEMBER AMES: Okay. Yes.

2 (Off microphone discussion)

3 CHAIR RIZZARDI: Catch share
4 implementation can be undermined by
5 independent ecological problems such as
6 fishery stock declines associated with
7 changing ocean conditions. Period.

8 MEMBER CATES: I have a comment to
9 make as we start diving into this, and it's
10 not related to this. It's not related to this
11 particular issue, but more as I go through the
12 document.

13 I don't know other than staff and
14 maybe Randy Fisher if anyone was here when we
15 started Vision 2020, but I just wanted to
16 state we had a room full of people similar to
17 this that had very different backgrounds, very
18 different opinions, and it was a long, long
19 process. It was a tough process to get to the
20 document that you're seeing.

21 I will tell you that almost every
22 word was vetted in the document. A lot of

1 time was taken to how much information should
2 be on each subject, where the placement of the
3 subject is. So I just caution that as you
4 change the document take that in mind that a
5 lot of good people put a lot of, lot of hard
6 work into this, and it wasn't, I think it was
7 two years maybe, and every word is important.

8 Every single word in this document
9 and where it is, there's a meaning behind it
10 or there's a reason for it being that way.
11 The document didn't start out this way.

12 I know this group has its option
13 to make its own mark on it, but as I read
14 through some of the changes that are going to
15 come up, I tell you, it hit me in the na'au,
16 in Hawaiian it's gut, like, oh, this -- so
17 proceed cautiously and take your time and just
18 go through every, you know, be mindful of what
19 was done in the past.

20 MEMBER DOERR: Is there any more
21 discussion on Ted's suggested addition there?

22 Paul?

1 MEMBER CLAMPITT: I haven't had
2 time to digest it, you know. I'm looking at
3 it and most of these things I've seen, and
4 this is new.

5 I don't think anybody's suggesting
6 that catch shares will solve ecological
7 problems, per se, anyway, other than it can
8 help in by-catch issues if you, you know,
9 aren't throwing fish back, now you're keeping
10 them.

11 And so my point is, I don't know
12 why it's necessary to put that sentence in
13 there.

14 MEMBER AMES: I felt that too.
15 But up to the point where you start talking to
16 the fishing community in New England and/or
17 Council members in general, there's a
18 perception that catch shares solves, is a
19 cure-all.

20 And it's a valuable tool, but it's
21 not a cure-all because it addresses a
22 different suite of factors than do the

1 ecological measures such as habitat or species
2 diversity, et cetera. That was what I was
3 simply trying to make a point that --

4 (Off microphone discussion)

5 MEMBER CLAMPITT: Not a cure-all
6 for anything already so --

7 (Off microphone discussion)

8 MEMBER DOERR: Just to provide Ted
9 and others a little bit of background because
10 I'm not sure who all was there, but to build
11 onto Randy's point about the original version
12 of the document, we had extensive discussions
13 about catch shares and the catch share policy
14 that NOAA had put out a couple years ago. We
15 devoted pretty much a whole meeting to it in
16 Hawaii. Hawaii, right?

17 And so much of the concerns that
18 you have brought up were brought up then and
19 this is the resulting language that you see.
20 So from my perspective, I feel as if your
21 concerns about it not being a cure-all for
22 fisheries management is reflected in there.

1 And we are attempting to keep this
2 document as tight as possible, and also
3 reflect, and this is just sort of for
4 everybody, reflect the fact that the audience
5 for this is, and this is something to keep in
6 mind, that the audience for this document is
7 the NOAA administrator and the Secretary of
8 Commerce. So just sort of just keep that in
9 mind.

10 But I just wanted you to know and
11 others to know that there was a big meeting
12 devoted, actually a meeting and a half
13 probably, devoted to developing language on
14 catch shares. And so that gets to Randy's
15 point of a lot of this has been hashed out.

16 CHAIR RIZZARDI: So I understand,
17 Ted, first meeting, Columbus, first meeting.
18 You're getting thrown into a document that's
19 near the tail end, so that does create some of
20 the dynamic we're dealing with.

21 Just big picture context and a
22 reminder, the document has been vetted as both

1 Randy and Patty have articulated. There's
2 been drafts of this floating around since
3 September. The final draft's been out there
4 since the first week of October.

5 And what I'd really like us to do
6 is as best we can, number one, remember this
7 has evolved over time. We should be cautious
8 in making further amendments. Number two,
9 we've only got a limited amount of time at
10 this meeting. All right, so if you've got
11 specific proposals let's be a laser beam about
12 it and plow forward.

13 And the third one is, remember
14 that this is a consensus document. It doesn't
15 necessarily mean that you endorse every word
16 in it. Reserve your opposition for things
17 where you're really, really concerned.

18 You know, there's a concept in
19 consensus development called "standing aside."
20 And if you can stand aside and in good
21 conscience, you don't absolutely oppose it,
22 that's okay. It is a consensus document, it

1 is not a unanimous document. So just three
2 basic principles.

3 MEMBER AMES: That being said, if
4 there's serious concern in the group about
5 including that sentence it's fine to amend.
6 My concern I've shared already and I felt that
7 it would be valuable to have it in there
8 simply as a clarification point. But if you
9 feel that issue has been well vetted there,
10 fine.

11 MEMBER DOERR: Thank you. It
12 looks like Paul is still thinking.

13 MEMBER CLAMPITT: I'm just
14 reading. It's just that we're adding more
15 time to the document.

16 (Off microphone discussion)

17 MEMBER CLAMPITT: I said I didn't
18 have a problem and I'm trying not to repeat
19 myself.

20 The fact is that, you know, you
21 could put that statement somewhere else in the
22 document as just talking about the ecological

1 effects, because that's the core in the way I
2 read it of what it's all about. And this is
3 actually talking about just catch shares, and
4 catch shares are an economic tool and
5 everybody recognizes that.

6 And so I would take it out of this
7 portion of the document. I may put it, an
8 ecological phrase somewhere else in the
9 document like in habitat or one of those
10 places, but that's just my two cents' worth.
11 Thank you.

12 MEMBER DOERR: So I'm not hearing
13 any major heartburn over this, of re-including
14 this. So if that's the case I'm going to
15 suggest we leave it in and move on. Everybody
16 comfortable? Okay, thank you, Ted.

17 If we go down to -- I'm sorry, I'm
18 trying to find -- yes, so this is one of the
19 sections that I can't remember if it was Paul
20 or me that recommended pulling this up from
21 the appendix. And this is then the trends and
22 findings section again for sustainable

1 fisheries to sort of set the stage for the
2 recommendations that are below.

3 (Off the record comments)

4 MEMBER DOERR: But again this was
5 from the appendix. Language wasn't changed
6 except for me tightening it. So it is not
7 new. We'll give folks a minute to just
8 refresh your memories since you've read this
9 document already like three times.

10 Tony?

11 (Off microphone discussion)

12 MEMBER DOERR: The last sentence
13 of the first paragraph?

14 (Off microphone discussion)

15 MEMBER CHATWIN: So for the record
16 I suggest that we delete the "perverse" out
17 of, or find a substitute way of communicating
18 the negative connotation of a shorter season.
19 It's just that word is kind of weird.

20 MEMBER DOERR: I'm good with just
21 taking out the word unless anybody can think
22 of a -

1 (Off microphone discussion)

2 MEMBER DOERR: Okay, down to the
3 international fisheries management
4 organizations. This was something that Paul
5 had suggested to move up from, and I know this
6 is not on one of the five list so --

7 MEMBER CATES: Have you left that
8 section already?

9 MEMBER DOERR: Which section? We
10 can go back. Was there something?

11 MEMBER CATES: Educate us on what
12 HMS and RF and those --

13 MEMBER DOERR: Oh, HMS is highly
14 migratory species and --

15 (Off microphone discussion)

16 MEMBER DOERR: Yes.

17 MEMBER CATES: So I guess the
18 point I would have is we don't know where
19 these, and the Secretary of Commerce wouldn't
20 know.

21 (Off microphone discussion)

22 MEMBER DOERR: And can you do the

1 same for HMS?

2 (Off microphone discussion)

3 MEMBER DOERR: So again this was
4 pulled up, this was something that Paul
5 thought, I don't mean to, to pull up from the
6 appendix.

7 MEMBER CLAMPITT: Well, I thought
8 about Ed Ebisui. You know, I was just
9 thinking about Ed Ebisui, and we don't really
10 have anybody here representing the Eastern
11 Pacific at the moment.

12 And I think this is kind of an
13 important issue for them is the fact that, you
14 know, they're not playing with an even deck
15 out there because there's people from foreign
16 countries that are taking advantage of these
17 highly migratory species and they don't care
18 what the quotas are.

19 So I thought it was probably not a
20 good idea just to delete the whole thing. You
21 know, we're getting rid of the appendix and I
22 was just thinking, well, this is might be one

1 item that we might want to save.

2 MEMBER WALLACE: I agree.

3 MEMBER DOERR: Any other questions
4 or comments about this paragraph? No, okay.

5 So then moving down to the
6 recommendations, this is actually when Keith
7 wrote off the list of issues with catch
8 shares. The second bullet was actually the
9 topic that the ad hoc group decided to defer
10 to the full committee. And I believe it was,
11 who was it that originally --

12 MEMBER CLAMPITT: Me.

13 MEMBER DOERR: It was suggested,
14 Paul suggested the addition of the sentence
15 that reads, "Any future allocation or quotas
16 should be built into a management plan from
17 the onset," getting to the economic
18 uncertainty.

19 And so we started some discussions
20 on one of our conference calls about the best
21 way to address sort of the economic
22 uncertainty that comes with potential

1 reallocation under catch shares. And the
2 alternate language that you see there that
3 starts with "management plan should include
4 provisions," was my attempt at alternative
5 language to address the concern of folks on
6 the phone.

7 But I will leave it to the folks
8 on the phone to speak for yourself as to what
9 your concerns were.

10 Dave?

11 MEMBER WALLACE: Yes, I agreed
12 with Paul on his language and I still think
13 that it's appropriate.

14 MEMBER DOERR: Julie?

15 MEMBER MORRIS: Yes, it was
16 Michelle and I who objected to the language
17 because it seemed like it would be really
18 difficult for all future, or any future
19 reallocation of quota to be built into the
20 original management plan.

21 And so I think Patty's alternative
22 works well for me. It suggests that the

1 management plan should include provisions that
2 would guide future considerations of
3 reallocation of quota and that there would be
4 a set of criteria that would guide those that
5 could be included in the management plan.

6 I think that's a far more helpful,
7 I think it is in the spirit of what Paul
8 wanted and would be more helpful and
9 operational.

10 MEMBER AMES: One of the
11 difficulties we have, and I'm not sure that
12 this addresses it, but one of the difficulties
13 we have is that the groundfish fishery, in
14 particular in the Gulf of Maine for boats 40
15 foot or in that vicinity, was a seasonal
16 fishery. And diversity in fisheries is how
17 small scale, coastal fishermen survive and
18 they have basically lost access to the
19 fishery.

20 And I've been hoping that
21 somewhere in this there would be a provision
22 that suggests how new entrants can be

1 franchised with credible amounts of quota.

2 The difficulty that exists today
3 is that if you want to buy a permit with quota
4 attached you end up being in a situation where
5 you have to invest half a million dollars
6 that's appropriate for a 60 to 90 foot boat
7 and, you know, that's the bottom line even
8 with a small amount of quota when you're
9 looking for access rights for two or three
10 months out of the year.

11 It's a valuable niche and we're
12 still trying to sort out how to do it. But if
13 there is some provision in there for recycling
14 or reintroducing access, a mechanism for
15 gaining access into a fishery rather than
16 turning the coastal fleet into tenant
17 fisherman, it would be very helpful.

18 The situation is, you can pick up
19 a permit and if you want to rent quota, for
20 example, codfish, the rent for a pound of
21 codfish is about \$1.50, \$1.60, and the ex-
22 vessel value is \$2.00 to \$2.50 a pound. So

1 you're really put into a difficult situation.

2 That was all. Entrants.

3 MEMBER DOERR: I'm viewing that as
4 something slightly different than
5 reallocation. I'm hearing what your comments
6 are about, sort of new entrants and not
7 necessarily reallocation. So can we put that
8 in the parking lot for right now?

9 Julie and Tony?

10 MEMBER BONNEY: I guess I'm
11 struggling in terms of it seems like some of
12 the recommendations under the catch share
13 programs are kind of cherry picking some of
14 the allowed provisions out of the Magnuson.

15 So I view this as the duration of
16 a quota share allocation, you know, so you can
17 have a limited duration or that you can
18 automatically roll over for the next series
19 for a quota share.

20 So this is basically flagging the
21 idea that if you're going to, what, you can do
22 an Australian drop-through where you meet

1 certain criteria, and if you meet those
2 criteria then you know for certain what's
3 going to happen with that quota in the next
4 series.

5 You have the ability to design a
6 program where your share is only good for 15
7 years and then it lapses and then the Council
8 would have to decide what happens next.

9 So I think the two sentences say
10 two totally different things to me. One says
11 that you must consider what's going to happen
12 with the quota share when you set out a
13 program and the alternative, so it's basically
14 saying you must consider reallocation when you
15 define a quota share system. That is the
16 alternative language.

17 While the other language says, if
18 you're going to reallocate you need to tell
19 people up front. So I don't know that they're
20 tradeable, but I don't know what the
21 compromise is.

22 I think in a catch share program

1 you need to consider a design that allows for
2 a change in the allocation at some future
3 date, but I don't necessarily believe that you
4 have to do that.

5 So how you could reword that to
6 try to meet the middle of the road which is,
7 participants need to understand what their
8 asset's going to be in the future, and you
9 need to define that up front when you develop
10 a program.

11 I'm fine with that, but the way
12 these two things are structured I don't think
13 it meets the middle of the road, and I'm not
14 a big tweaker on language so I don't know who
15 would be the one to come up with kind of a
16 compromise.

17 But I guess what I'm saying is,
18 yes, I believe that when you design a program
19 you need to think about the durability of the
20 privilege, but not necessarily that you have
21 to do a reallocation sometime down the road.

22 MEMBER CHATWIN: Thank you. I

1 favor the alternative language. And just to
2 maybe provide a hand here, when we discussed
3 catch share policy, one of the findings of
4 this committee was that it was important for
5 catch share programs to have explicit
6 consideration of how new entrants would come
7 into the fishery. And I do think that is
8 related to the issue of reallocation of quota.
9 It can be.

10 So I would just suggest, and I was
11 looking at all the bullets. We don't really
12 have an explicit statement on new entrants in
13 the future, so maybe it would address Ted's
14 concern if we said, "the management should
15 include provisions to consider future
16 reallocations of quota and new entrants to the
17 fishery based on," and again this is a Band-
18 Aid.

19 We could do a separate bullet for
20 new entrants based on the document that we did
21 for catch shares in Hawaii. We can fish that
22 out. I can look for that. But that was an

1 important one.

2 MEMBER CLAMPITT: Well, when these
3 catch share plans are, you know, vetted and
4 worked out at the beginning that's one of the
5 major things that happens right off the bat
6 is, you know, how long is this going to last?
7 Are we going to have reallocation? And that's
8 what goes on now.

9 But these earlier catch share
10 programs like the one that Dave's been
11 involved in and the one that I've been
12 involved in, the pioneer ones, you know,
13 they've been around for over 20 years, and now
14 all of a sudden there's talk about
15 reallocations.

16 Some of these people have put
17 tremendous amounts of effort and money into
18 these things and the idea of reallocation at
19 this late date, you know, scares the hell out
20 of everybody involved in those fisheries.

21 So I don't think we need to get
22 all that complicated here because, you know,

1 your concerns and his concerns are being
2 vetted now with these programs. I just want
3 to make sure that people know what they have
4 going into it when it happens.

5 So a simple sentence saying,
6 "future reallocation of quotas should be built
7 into the plan from the onset," really all you
8 need.

9 MEMBER WALLACE: Well, you know,
10 when you think about the dynamics, and I was
11 highly involved in the first catch share
12 program in the United States. We went through
13 the discussion on new entrants and what have
14 you, and it goes all the way back.

15 I love to get guys like Ted and
16 ask them the one question and that is, before
17 there was any Fisheries Conservation and
18 Management Act, Ted was around before then, so
19 was I, and I say, how did you get into
20 business?

21 You got into business, you start
22 off on a deck of a boat and then somehow you

1 earned enough money so you could buy a boat.
2 So there's never been a free entrance into any
3 fishery in the United States that I'm aware
4 of. Well, maybe there is if you're walking
5 down the beach and you don't have a rake or
6 anything and you're picking up fish. But, you
7 know, then it's just your sweat equity.

8 But the fact of the matter is,
9 this notion that the programs that were put in
10 place after this was vetted and said, we are
11 not going to mandate changes in how quota
12 shares are going to be transferred other than
13 in the free market, then it becomes priced on
14 that basis.

15 If there is a question that says
16 your quota is going to expire in five years,
17 then everybody recalculates what they can
18 afford to pay for to have a reasonable return
19 on their investment.

20 And this notion that after the
21 fact we're going to propose to change the
22 rules is very, very difficult. Paul's

1 statement says for any new group you put that
2 in, the value of that quota then goes down.

3 The interesting thing is the
4 little guy gets hurt most in that because if
5 he has a little bit of quota now it's worth
6 less. All those people that you wanted to
7 retire, because this is an industry-funded
8 buyout plan for overcapitalized fisheries.
9 That's what it's for. And, you know, and if
10 you erode it, all you do is just make it less
11 effective. Thank you.

12 MEMBER DOERR: Heidi, I emailed
13 you a sentence at my attempt to compromise
14 language. So you could pull that up.

15 (Off microphone discussion)

16 MEMBER DOERR: Paul is the blue.
17 I am the red.

18 CHAIR RIZZARDI: I'm not seeing
19 much of a gap between --

20 (Off microphone discussion)

21 MEMBER BONNEY: That works for me
22 if you guys want to hear that or do you want

1 to go with Patty has? Let's see if hers is,
2 fits that.

3 MEMBER DOERR: Oh, okay. Sorry.

4 (Off microphone discussion)

5 MEMBER DOERR: Sure.

6 CHAIR RIZZARDI: Remember that
7 when we draft this document, this is big
8 picture, national level thinking, and at the
9 regional implementation level there's always
10 going to be devil in the details.

11 I think either one of those
12 phrases still leaves that notion open. At the
13 end of the day catch shares are implemented by
14 the regional fishery management council with
15 all that effort, you know, scrutinizing each
16 of the individual needs there. And this
17 concept's going to pervade this whole
18 document.

19 So remember, we're thinking on a
20 big picture scale, and remember there's going
21 to be room for those details to work
22 themselves out.

1 MEMBER DOERR: Ted?

2 MEMBER AMES: Yes. The difficulty
3 that confronts Gulf of Maine, smaller vessel
4 fishermen, and I suspect in other areas too is
5 the permits no longer exist. It's been 20
6 years. The quota is attached to the vessel
7 and the vessels are much larger than the
8 traditional fleet that fishes the coast.

9 And if there's a pool of quota
10 that's available for purchase that's one
11 thing, but the situation that exists today is
12 that fishermen if they want to attempt to go
13 groundfishing. For example, they have to buy
14 a permit from a boat that's much larger than
15 their own operation.

16 I'm trying to find a way around it
17 that it creates a pool of quota that can be
18 purchased by this smaller scale fleet to
19 maintain a traditional fishery.

20 (Off microphone discussion)

21 MEMBER DOERR: "During the
22 development of a catch share program regional

1 Councils should consider provisions that
2 address potential future reallocation of the
3 quota and new entrants."

4 (Off microphone discussion)

5 MEMBER CLAMPITT: I don't either.
6 You know, it's simple, a little more
7 complicated, more complicated yet.

8 (Off microphone discussion)

9 MEMBER DOERR: Anybody have any
10 concerns with Alternative 2 that's up there in
11 green, or yellow? Does that work for you?
12 Does it work for you, Julie?

13 Okay. Without any major
14 heartburn, I'm going to suggest we go with
15 Alternative 2 and move on. Excellent.

16 The other two bullets in red in
17 that section came up from the appendix as
18 well. The language should not have been
19 changed. I would have just tightened it.

20 But there are a lot of
21 recommendations included in the appendices
22 that I thought shouldn't necessarily have been

1 lost since that is sort of the point of this
2 document is to provide recommendations.

3 Okay, moving on to the annual
4 catch limits recommendations. So I'm trying
5 to refresh my memory on the annual catch
6 limits discussion. We have two Julies going
7 on. This section with the annual catch limits
8 was a new section. Yes, although you
9 recommended the deletion so I don't know if
10 that was old language.

11 Does anybody have any concerns
12 with deleting that first bullet? And then the
13 comments over to the right that you can't see
14 is that overfishing levels are set by the SSCs
15 and not NOAA.

16 Silence means assent, folks,
17 but this is something that was originally in
18 there. No concerns? Okay.

19 (Off microphone discussion)

20 MEMBER DOERR: That first sentence
21 would then come out, yes. Yes, just leave it
22 for now.

1 Down to recreational fishing
2 recommendations. There were a couple of
3 deletions recommended by Michelle who is not
4 here.

5 But the recreational fishing
6 recommendations were developed by the rec
7 fishing working group that we have that was
8 established a year, year and a half ago, and
9 vetted through them, and this group also saw
10 them at the last meeting.

11 And unfortunately Michelle isn't
12 here to talk about her recommended deletions,
13 but did anybody -- Paul?

14 MEMBER CLAMPITT: I differ with
15 her on deleting. She's not here to defend
16 what she wanted to do, but "the fishery
17 management plan should include analysis of
18 quota share transfer between recreational and
19 commercial sectors and should incorporate
20 market mechanisms where appropriate," she
21 wants to get rid of that? I don't agree with
22 her.

1 We just went through a big
2 allocation fight up in Alaska between the
3 halibut recreational and commercial sectors
4 and it's been pretty brutal for about ten
5 years. And if there would have been something
6 thought about to begin with when the program
7 went through it would have been much less
8 painful. So I just disagree with her on
9 removing that.

10 MEMBER BONNEY: I guess my only
11 comment on some of these is it's very
12 hardwired. It isn't "could consider" or, you
13 know, so I agree with Paul that you should
14 consider some mechanism to allow quota
15 transfer, but it says, "should include," so
16 you don't really have the wiggle room as the
17 Council that you're going to do it versus
18 looking at it to see if it makes sense.

19 MEMBER MORRIS: We talked a lot
20 about this in the Gulf fisheries, Gulf of
21 Mexico Management Council, and it's very
22 contested, very controversial. How to do it,

1 whether to do it.

2 Market mechanisms are a new tool
3 that hasn't been used a lot in allocation
4 fights or decisions in the Gulf of Mexico, and
5 so to suggest that everyone should include
6 that, I think, is kind of a radical step
7 forward and I'm not sure MAFAC should be
8 taking that step as a recommendation.

9 It seems like it's something that
10 we've talked a lot about trying in the red
11 snapper fishery, but I don't know if much
12 progress has been made yet in terms of
13 implementing it there. And it's very, very
14 contested, very much not a consensus opinion
15 in a place like the Gulf of Mexico Council.

16 MEMBER DOERR: Is there anybody
17 else that had a comment on this? Randy?

18 MEMBER CATES: I agree with Paul.
19 I think it should be left in.

20 MEMBER DOERR: I'm going to
21 suggest that for now we leave this in here,
22 and then Ken Franke, who's the chair in the

1 rec fish subcommittee, who couldn't be here
2 this morning to speak to this as well.

3 And so I'm going to suggest we
4 leave both of those things in, but if we could
5 get Julie and Julie and Ken together with Phil
6 and you guys can talk about softening that so
7 it's not a requirement, and not a "should" but
8 a "could possibly," to see if folks are okay
9 with that.

10 MEMBER BROWN: Well, I would
11 support what Julie is saying, because if you
12 go back to the catch shares portion, you know,
13 it clearly says that these are tools that some
14 situations may not be used. So forcing the
15 hand of people to using would be inconsistent
16 with what's already in the text.

17 MEMBER DOERR: I would agree as
18 well. I just think with the chair of that
19 subcommittee not being here, and as he
20 represented the working group, and the chair
21 of the subcommittee not being here, I wanted
22 him to be able to weigh in on it as well.

1 And so if Julie and Columbus and
2 Julie want to get together with Phil and Ken
3 this afternoon when he gets back, we'll sort
4 of keep this one open. I think it's probably
5 an easy fix. Great.

6 Russ, yes?

7 MR. DUNN: I have a couple, two
8 questions really for clarity, for NOAA's
9 interpretation of when this is finalized.

10 In the first bullet, referring to
11 sale of recreationally caught fish, my
12 question is, how would the committee view for-
13 hire operators given that they are for-profit
14 enterprises?

15 And in at least one case where
16 certainly an Atlantic HMS, it's the for-hire
17 portion of the fleet that can sell its fish.
18 How does the committee perceive the for-hire,
19 I don't want to use an inflammatory word, but
20 sector of the fishery, portion of the fishery?

21 MEMBER DOERR: Mark, have we had
22 discussions on that in previous meetings

1 about, I mean I don't want to get too far off
2 from going through this document and the
3 edits.

4 DR. HOLLIDAY: So the original
5 2020 was based on a prior MAFAC discussion
6 about the sale of recreationally caught fish.
7 I think we can go back to the record and find
8 out the extent that it included the for-hire
9 sector.

10 But there was a discussion at the
11 time, I just don't want to rely on my memory
12 to refresh all of the details of it. So I
13 mean if it's for clarification for NOAA at
14 some point in the future we can research that
15 and get that offline.

16 MR. DUNN: And I'm not trying to
17 drive it any particular way, I just think as
18 it returns to us if we then, you know, as we
19 begin and try and act upon these that
20 recommendation may be one we need to know how
21 best to or most appropriately to interpret it.

22 MEMBER DOERR: Randy, and then

1 Dave.

2 MEMBER CATES: We did discuss
3 this. If you want to look it up it was at the
4 St. Pete meeting in Florida, and Bill Hogarth
5 was there. And it was a really good
6 discussion and it was one of the rare meetings
7 where the agenda was sparse enough to allow a
8 lengthy discussion. It wasn't a rush thing or
9 anything.

10 And the question it really came
11 down to is, what is a commercial fisherman?
12 And at the end of the day consensus was if you
13 sell your fish you're a commercial fisherman,
14 plain and simple.

15 So it did dive in, and if you want
16 to go back in the notes, I'd go back in the
17 minutes and look at that but it was vetted out
18 pretty extensively.

19 MEMBER DOERR: Dave?

20 MEMBER WALLACE: If you go off on
21 a head boat and you catch a fish, do you own
22 the fish or does the boat own the fish? If

1 the boat owns the fish then they're a
2 commercial fisherman and they have to abide by
3 the commercial fisherman rules.

4 And so, you know, I've fished on
5 charter boats before, and when we caught a
6 fish then whoever caught the fish it's their
7 fish, and then there are recreational
8 fishermen. And I don't think the recreational
9 fishermen should sell their fish because they
10 compete directly with commercial fishermen.

11 I used to run a commercial fish
12 stock. When we bought recreational fish, very
13 poor quality, not well handled, and they drove
14 the market down for the commercial fisherman.
15 And so I think that we need to have a very
16 clear distinction for all of that.

17 MEMBER CATES: You're right on
18 that. And when we got discussing that what
19 overlaps into that is HASP rules. And if
20 you're a recreational fisherman and you're
21 selling it, HASP comes in the line and there's
22 laws against, you know, how you handle the

1 fish and what is supposed to be, traceability
2 and all of that. So there are overarching
3 rules already in place.

4 MEMBER DOERR: Did you have
5 another question, Russ?

6 MR. DUNN: I did. In the next
7 bullet, so the first sentence discusses
8 increasing the effectiveness of MRIP and data
9 quality. Then the second sentence goes on to
10 voice a concern that if the data are used
11 improperly.

12 And the question I have is, is
13 that bullet trying to get really at improper
14 use as the second bullet indicates or at the
15 potential inadequacy of the data?

16 Is it saying what the committee
17 really intends to or not, is my real question.
18 Because I would view sort of data quality and
19 improper use of the data, I can see the
20 potential link, but sort of I just view them
21 as separate issues. So I'd ask for
22 clarification there.

1 MEMBER DOERR: Yes. I think this
2 is again a discussion without having Ken here
3 to speak for it because I think he's the
4 person to sort of speak to what that means.

5 So if we have time, since we have
6 time on the agenda tomorrow morning for this,
7 maybe we can spend 20 minutes on the two rec
8 fishing things, would be my recommendation.

9 Julie?

10 MEMBER BONNEY: I am just
11 wondering since Julie and Julie and Columbus
12 are supposed to deal with some of the other
13 issues with rec with Ken, maybe we should just
14 put all these in that category and try to sort
15 it out and come back with, I think it's just
16 clarity of language more than anything else.

17 MEMBER DOERR: I would agree.
18 Thank you.

19 MR. DUNN: In the last bullet I
20 think you're missing the word "and" after rec
21 fishing. It just doesn't read quite
22 correctly.

1 MEMBER DOERR: Thank you.

2 Okay, so that is rec fishing for
3 now. The next two sections of recommendations
4 in red on rebuilding stocks and the regional
5 fishery management organizations, the
6 international portion, that all came up from
7 the appendices as well.

8 MEMBER BONNEY: I have a question.

9 MEMBER DOERR: Julie and Julie.

10 MEMBER BONNEY: I guess I'm having
11 trouble with the, and this is another rec
12 question, but "NOAA should shift recreational
13 management to be based on number of fish
14 caught in contrast to number of pounds
15 caught."

16 There again they "could" but I
17 don't know that they necessarily "should." I
18 mean I think there's tradeoffs in either
19 accounting mechanism, so I think it should be
20 softened, so to speak.

21 MEMBER DOERR: I'll add that to
22 the list. Julie? No.

1 Any concerns with the text in red
2 there about rebuilding stocks in the
3 international RFMOs? Again they came up from
4 the appendices so this is not new language.

5 Okay, moving on. Down to, Heidi,
6 bottom of Page 9, for protected resources.
7 Yes. This falls under the climate change
8 category of our list of five.

9 We had two areas that were still
10 up for discussion. It's this area with ocean
11 acidification and corals, and then towards the
12 end there's a changing oceans section that
13 talks about sea level rise. So it falls under
14 those two areas.

15 This was new language. The
16 original language, not new. The recommended
17 changes were made to the original language to
18 provide a little bit more clarity.

19 Paul, then Julie, and then Dave.

20 MEMBER MORRIS: Actually the 2020
21 Vision that we were revising didn't have a
22 section on protected resources, so the whole

1 protected resources is new language that was
2 developed by the subcommittee over the summer.
3 We had just neglected to address protected
4 resources in the earlier versions of 2020.
5 Just wanted to clarify that.

6 MEMBER DOERR: Thank you.

7 CHAIR RIZZARDI: I have already
8 been sidebarring on some issues on the
9 protected resources section. I realize it's
10 not the first five. I'll have very specific
11 language that hopefully will be a quick insert
12 and revision to the text for tomorrow. We'll
13 follow up on addition discussion.

14 MEMBER DOERR: Okay. Paul?

15 MEMBER CLAMPITT: Well, just my
16 concerns with some of the language is the
17 absolutes is really all it is. It's just, you
18 know, that a lot of this is preliminary
19 studies. They're not very well vetted. It's
20 ongoing.

21 And, you know, the absolute
22 language, you know, I prefer "may." "Warming

1 ocean water and acidification pollution and
2 sedimentation "may" place corals at risk."
3 That's my only complaint.

4 And then I wanted to add, there
5 wasn't a lot of talk in here about
6 sedimentation and, you know, the removal of
7 herbivorous fish, and I wanted to add some of
8 that because that also stresses corals, I
9 think, probably more so than acidification
10 does. And that's just where I'm going with my
11 comments.

12 MEMBER MORRIS: Yes, Paul made
13 those comments when we had our conference call
14 about this, and so this section was rewritten
15 and referenced to include the references and
16 to talk more about smothering in
17 sedimentation, and herbivorous fish. So this
18 was rewritten to address your concerns, Paul.

19 MEMBER CLAMPITT: Well, thank you.
20 I appreciate that. On the first sentence, you
21 know, "may" is crossed out. It probably
22 should be after "sedimentation." I don't know

1 or I would change it. I know sedimentation
2 absolutely places corals at risk. That's a
3 fact, and pollution.

4 But ocean acidification I think is
5 still a study that is relatively new and I'm
6 not so sure. I read your article by the way
7 that you gave me and there was some things in
8 that that were a little bit sketchy, in my
9 opinion.

10 MEMBER DOERR: Pam?

11 MEMBER YOCHER: That was going to
12 be my only comment is that he had suggested
13 that "may" be added back. But you already
14 said it.

15 MEMBER CATES: I agree with the
16 comments. The issue is not a foregone
17 conclusion though many try and make it a
18 foregone conclusion. But based on science
19 it's not a foregone conclusion yet. So
20 inserting "may" I think is very appropriate.

21 MEMBER DOERR: Dave, and then I'm
22 going to ask folks if anybody has heartburn

1 over inserting "may."

2 CHAIR RIZZARDI: I'll do it in the
3 interest of compromise, but I'm going to say
4 there's no question that pollution and
5 sedimentation place coral at risk.

6 MEMBER CLAMPITT: I agree with
7 that.

8 CHAIR RIZZARDI: I mean it's
9 absolute, so the statement is still true as
10 written. Even if you reject ocean warming and
11 acidification, pollution and sedimentation do
12 place them at risk. So the compound of the
13 four concepts with an "and" is true.

14 MEMBER DOERR: Paul, then Julie.

15 MEMBER CLAMPITT: I think just --
16 written. Now you could, you know,
17 sedimentation and pollution, absolutes. But
18 warming ocean and acidification, I want to see
19 "may."

20 CHAIR RIZZARDI: Which goes back
21 to the Patty rule, and if you have changes to
22 offer then come in with language.

1 MEMBER CLAMPITT: I did. I did.

2 I sent it to her and I handed it to her.

3 MEMBER DOERR: Yes. Heidi has it.

4 Julie, while Heidi pulls that up?

5 MEMBER MORRIS: Well, it seems
6 like we have a pattern at MAFAC that anytime
7 we generate a document that tries to talk
8 about climate change, acidification, ocean
9 warming, Randy and Paul say that they don't
10 believe --

11 (Off microphone discussion)

12 MEMBER MORRIS: -- is a problem,
13 and so, you know, we have references from well
14 regarded journals like Science and Nature that
15 support these claims, but still we always step
16 back from firmly saying as MAFAC to NOAA that
17 these are real problems, that we need to be
18 anticipating for the future and planning.

19 And it's very frustrating to be at
20 a group like MAFAC and have our progress,
21 these issues keeping held back by a small
22 number of people who doubt these issues, doubt

1 these effects, and have an alternative science
2 that supports that.

3 MEMBER DOERR: Oh my gosh. I do
4 not see the order, and so I'm going to go with
5 Paul, Tony, Bob, Ted, Randy, Dave.

6 MEMBER CLAMPITT: I've never said
7 that I didn't believe that climate change is
8 happening or that there's a possibility of
9 ocean warming. I'm just saying that I don't
10 like these absolutes. I think there's a lot
11 of studying to be done yet, and I'm not a
12 proponent of catastrophic climate change. I
13 don't think it's going to be catastrophic.
14 That's all.

15 MEMBER DOERR: Tony?

16 MEMBER CHATWIN: Thank you. First
17 of all, I'd like to say that I'm really
18 pleased that this language is in here. I
19 think recognizing that tackling all the
20 stresses that may or may not impact coral
21 improves their resilience to other impacts.
22 I think that's a key message that's in there.

1 I think we don't have to get into
2 a big dispute about whether there's a "may" or
3 "may not" in there. I would personally go
4 with the language that's there.

5 I would also go with the
6 suggestion by Paul that sort of splits out,
7 I'd have one amendment which is, I think
8 there's no question that warming, warm waters
9 can and do impact coral. There's bleaching
10 events that are associated with temperature.

11 I mean that, without having to get
12 into the argument of where that comes from,
13 you know, what's driving that warming, if
14 coral's outside of their temperature
15 especially on the high side, they will bleach,
16 and if they are further stressed they'll die.

17 So either way I don't think we
18 need to have a big debate about this. I think
19 this is good, and if "may" will get consensus
20 I would support it. If we want to separate
21 it, I would support acidification being
22 described as an emerging potential threat to

1 corals, but I think warming, sedimentation,
2 pollution, those are all proven threats.

3 Thanks.

4 MEMBER AMES: Very briefly, I
5 agree with Tony and with Julie as well. You
6 have to face reality. There are certain
7 things that do affect corals, and it's been
8 well established, well documented and peer
9 reviewed information about it. And we need to
10 incorporate the reality that these are factors
11 within it. So I agree with where Tony has
12 ended up with.

13 MEMBER CATES: Well, a couple of
14 comments. I have a whole business that deals
15 with corals. That's part of the work that I
16 do.

17 I was a general contractor when a
18 Navy ship went aground and destroyed a reef in
19 Hawaii, and I've been general contractor on
20 two other large vessels that destroyed a reef
21 and gone out and repaired the reef. And I
22 work with NOAA scientists and others that,

1 their field of expertise is in corals.

2 So I make my comments based on
3 that I've got some background working in,
4 around and trying to repair the corals and
5 what affects them and what doesn't. And I've
6 had a whole career in dealing with science and
7 scientists starting at age 15 training
8 dolphins.

9 So my point is this, when it comes
10 to global warming or corals or any issue,
11 science should always be questioned. Where I
12 get concerned is when people get upset with
13 people that do question science.

14 A good scientist is very proud to
15 defend their science, and when you have a body
16 or an organization that criticizes the
17 critiques that's what concerning to me.
18 There's nothing wrong with questioning
19 whatever work that be done. That's what we
20 should be doing and you should verify.

21 With regards to global warming or
22 ocean acidification there's always this

1 tendency to jump on the folks that question
2 it, and that's what I find alarming.

3 So having in the words "may" or
4 "may not" or whatever it is, I don't see
5 anything wrong with that. If it's proven to
6 be true then defend it.

7 With MAFAC, for those that are
8 new, it was a struggle for years at the
9 request of MAFAC, myself and others, to even
10 get the issue heard. And that was alarming to
11 many that supported the theories of global
12 warming and ocean acidification. Why was it
13 so difficult to get the person to really even
14 present the work, unlike any other issue we've
15 ever dealt with?

16 So my only point is, whether some
17 field that some of us are always raising as an
18 issue, we should, and all of you should raise,
19 if you have concerns on whatever it is, catch
20 shares or anything, you should raise it and
21 question it. There's nothing wrong with that.

22 MEMBER DOERR: Thank you. Dave,

1 and then I'm going to --

2 (Simultaneous speaking)

3 MEMBER DOERR: I'm going to make a
4 recommendation to move us forward here.

5 MEMBER WALLACE: To Ted.

6 MEMBER AMES: Very briefly, no
7 one's questioning the right or need for
8 challenging information. Certain things like
9 pollution from the Everglades drainage system
10 and its effect on coral has been well
11 established numerous times.

12 I was on a National Academy of
13 Science study group with Dave here, and that
14 was examined in great detail. The effect is
15 really well established. There are others
16 that are less clear, but my sense is the
17 consensus of scientific opinion on this is
18 that it's happening, and I signed on to it.

19 And I certainly don't insist that
20 everybody on the planet agrees with that.
21 It's just that after you've reviewed half a
22 dozen papers saying the same thing that are

1 peer reviewed, then you end up saying, oh,
2 yes. Well, it looks they've found a soft spot
3 in our knowledge about the system. That's
4 all.

5 I concur very comfortably with
6 your challenge to science, Randy. It's not a
7 problem at all.

8 MEMBER DOERR: Thank you,
9 everybody. I'm going to make a recommendation
10 in here so we can move forward.

11 I'm going to, building off of
12 Tony's recommendation of, and Paul's desire to
13 sort of split things out, I will take it upon
14 myself to split out that trend in italics, and
15 talk about ocean acidification as a potential
16 emerging threat to corals, and sort of have
17 everything else as is.

18 In concept, are folks okay with
19 that? And I'll have specific language
20 tomorrow morning.

21 CHAIR RIZZARDI: Good. Thank you.

22 MEMBER DOERR: Does that work?

1 Okay. Thank you, guys.

2 Moving on down to habitat. We
3 have a new habitat section here that I hope
4 everybody took the time to read. It focuses
5 on essential fish habitat with two different
6 recommendations about EFH and then the Clean
7 Water Act in relation to wetlands.

8 Tony, did you want to speak to
9 this at all since it's a new section or just
10 leave it to folks to read it and comment?

11 MEMBER CHATWIN: Thank you. It is
12 a new section, but I was just going through my
13 MAFAC notes and a lot of the things I said
14 here I said back in 2010 on EFH, so it
15 shouldn't be new to MAFAC.

16 But the essence of it is, and I
17 would encourage you to read it because in the
18 document the actual words used are important.
19 But the essence is, EFH is a tool that gets
20 NOAA a seat at the table, and the better the
21 information that is used to designate EFH the
22 more effective NOAA can be with using that

1 tool.

2 And so all it's calling for is for
3 continued, for the agency, and I'm using words
4 that are not in here, but to invest in EFH so
5 that future EFH designations are using Level
6 3 and Level 4 information, which ties EFH to
7 productivity of stocks.

8 I think everybody wins if we have
9 EFH that is designated at that level.
10 There'll be less, I think the EFH designations
11 won't be as expansive as they are now, and
12 they will be more valuable.

13 I think understanding how habitat
14 ties to productivity will allow fisheries
15 managers to incorporate it or give it credit
16 as a fishery management tool and give habitat
17 protection, give credit as other fishery
18 management tools.

19 And so that's the spirit but you
20 should read the actual language. And that's
21 that and I'm happy to discuss it.

22 MEMBER DOERR: Any comments on the

1 habitat section? Keith?

2 (Off microphone discussion)

3 CHAIR RIZZARDI: I'll have it
4 tomorrow morning.

5 MEMBER DOERR: Okay. Should we
6 move on to aquaculture in the meantime?

7 CHAIR RIZZARDI: Yes, please.

8 MEMBER DOERR: Okay. So Keith
9 will --

10 CHAIR RIZZARDI: And I think it's
11 accepted as friendly. I've already shared --

12 (Simultaneous speaking)

13 MEMBER DOERR: Okay. So we may
14 have a couple of additions or changes to the
15 habitat from Keith that we'll look at either
16 when we finish up or tomorrow morning.

17 MEMBER CHATWIN: And just one
18 other comment. In other places in the
19 document there are references to and
20 recommendations about habitat, and I did not
21 replicate them in this section.

22 MEMBER DOERR: Which is

1 appreciated.

2 MEMBER CHATWIN: Okay. Just so
3 folks know there is habitat in other places.

4 MEMBER DOERR: Yes. Okay. If
5 anybody has any recommended changes for
6 habitat get it to Tony this morning along with
7 Keith's, and we can take a look at it either
8 when we finish up if we have time or tomorrow
9 morning.

10 Moving on to aquaculture. This
11 was, I think, the final list of four or five
12 issues we had from the ad hoc calls. This was
13 language, the original aquaculture language
14 from the original Vision 2020 document. Bob
15 made some edits to tighten up the language and
16 then there were additional recommended
17 deletions.

18 So if we go down to, yes, that
19 section right there. This is in the related
20 trends and findings. Anybody have any
21 comments or concerns on this? We are on Page
22 14 for those on your computer.

1 George?

2 MEMBER NARDI: I don't have any
3 significant changes on the initial edits there
4 that tighten up the sentence. I just want to
5 confirm the last bullet that "'there's no
6 current legislative authority," and I'm
7 assuming, you know, that is correct, so I just
8 want to have that confirmed by NOAA.

9 I know if the Gulf rules were
10 moved forward and signed then maybe we would,
11 but until that's done I just want to confirm
12 we don't. And then maybe we'll deal with that
13 section before we get down to summary
14 recommendations.

15 MEMBER DOERR: Mark, if you could
16 provide that clarification, and then Randy.

17 DR. HOLLIDAY: I am not the
18 aquaculture expert, but I believe that the
19 assessment that you said is correct. It's not
20 in place.

21 MEMBER DOERR: Randy?

22 MEMBER CATES: So my understanding

1 of the situation we're in now is that the Gulf
2 Management Council has asked and implemented
3 an aquaculture and the ability to issue
4 leases.

5 The administrator agreed to it and
6 basically said that they would draft the rules
7 that the companies would have to abide by, so
8 they've been in a stalled status for several
9 years now.

10 Now a separate issue that I've had
11 to deal with in the Pacific Islands, Saipan
12 and other areas that are under the U.S. laws
13 and that the federal waters goes all the way
14 to shoreline, are desperately needing
15 aquaculture and requesting it.

16 West Pac has stated that they
17 believe they have the authority to issue
18 leases or permits and have grown tired of
19 waiting for NOAA to act on that. So I do
20 question, because I've heard two difference of
21 opinion from two different Councils.

22 One Council said they do have the

1 authority, the other is saying they have to
2 wait for NOAA to implement the rules. And I
3 am questioning, where are we with that?

4 DR. HOLLIDAY: So Sam briefly
5 talked yesterday about the goal for 2013 was
6 to get the regulatory framework for the Gulf
7 of Mexico FMP in place. I think the Western
8 Pacific Council, of all councils, have
9 authority to promulgate fishery management
10 plans, only the Secretary of Commerce has
11 rulemaking authority.

12 So a Council cannot independently
13 implement a rulemaking or a regulatory
14 framework regardless of what their approved
15 FMP says. That's a division of labor between
16 Councils and the Fishery Service.

17 So what's been lacking is the
18 implementation of the provisions of the
19 fishery management plan for the Gulf of Mexico
20 that have to be promulgated through the
21 Secretary by notice and comment rulemaking.

22 So it's a subtle distinction, but

1 I think there is authority for all the
2 Councils to, and that's if they recognized
3 capability of the Councils to undertake
4 aquaculture management in the EEC. And the
5 implementation of what the Council in their
6 approved amendment to the Gulf plan is those
7 regulatory amendments have to be implemented
8 by Commerce.

9 MEMBER RHEAULT: Just to clarify,
10 we don't have current legislative authority to
11 lease waters, in federal waters, for federally
12 managed species. Yes, the Councils could and
13 yes, NOAA could do rulemaking. Yes, Congress
14 could get back to work and pass legislation.

15 All sorts of things could happen,
16 but currently there's no legislative authority
17 to grant a lease that would allow a grower to
18 have ownership rights over a federally managed
19 species in federal waters.

20 And I tried to address your
21 concern about the Pacific. I hope I achieved
22 that in both the recommendations and in the

1 trends.

2 MEMBER DOERR: Are we all
3 clarified? Okay. Moving down to the
4 recommendations, most of which were original
5 language with some recommended edits from
6 Michelle who is not here to speak to them,
7 unfortunately.

8 George and Tony?

9 MEMBER RHEAULT: Can I just
10 clarify where we're coming from here?

11 MEMBER DOERR: Yes, please.

12 MEMBER RHEAULT: The status of
13 what I wrote and what is being crossed out
14 here, so I wrote that we "must prioritize
15 advancement," and I believe that that was
16 Michelle who deleted that.

17 I wrote that it "would create jobs
18 and support coastal communities." Michelle
19 suggested deleting that. And then Michelle
20 suggests adding that "wild stocks must be
21 protected." And we have disagreement on that
22 because that's already existing law.

1 And then I wrote that "the U.S.
2 government should prioritize," on the bottom
3 there, and Michelle suggests deleting that.
4 And there we came to loggerheads.

5 MEMBER DOERR: Just to clarify.
6 This is just the first bullet?

7 MEMBER RHEAULT: Okay.

8 MEMBER DOERR: No, I'm asking, or
9 are you talking about all?

10 (Simultaneous speaking)

11 MEMBER RHEAULT: -- got all the
12 recommendations on this page and then there's
13 another one, I believe, on the next page,
14 another bunch of them.

15 MEMBER DOERR: Okay. George, Tony
16 and then Randy.

17 MEMBER NARDI: I think Bob just
18 said what I was going to say essentially. And
19 I'm going to put to the committee that I
20 suggest we revert to Bob's language and
21 delete, in my opinion, whether it's a motion
22 or comment, I disagree with Michelle's

1 changes, and I would recommend that either the
2 original language or the language Bob had just
3 described be the language recommended by the
4 committee, is my recommendation.

5 MEMBER DOERR: Tony, Randy, then
6 Dave. And I think we'll work off the
7 recommendation on the table of George's, to
8 revert back.

9 MEMBER CHATWIN: So just a
10 question, a clarification question on that.
11 Would that include the last bullet, which is,
12 NOAA should work with lawmakers to craft
13 legislation?

14 MEMBER NARDI: I didn't get, is
15 that on the next page?

16 MEMBER CHATWIN: Yes.

17 MEMBER NARDI: No, right now I'm
18 just on this page.

19 MALE PARTICIPANT: On just the
20 first two bullets?

21 MEMBER NARDI: One, two --

22 MEMBER CHATWIN: Fair enough. I

1 just think that your statement was to delete
2 all comments. And so I think that last bullet
3 is actually a, I don't know if that's the
4 actual language that should be used, but of
5 all the, it's the one that says, by 2020 we
6 want to have this legislation in place that
7 provides the authority that in the findings we
8 said was missing.

9 And I think that that's a concrete
10 goal and a visionary statement for 2020. We
11 may want to tweak the language, I'm open to
12 that. But I just think, my question was to
13 the aquaculture subcommittee, is thinking of
14 this as recommendations where we want to see
15 things by 2020.

16 Statements like, "NOAA should
17 continue to support the development," to me it
18 could be strengthened. What is it you want
19 NOAA to accomplish in this time period with
20 regard to our aquaculture?

21 And I think that when I read this
22 language I didn't see that in there except for

1 the one bullet where it talks about actually
2 crafting legislation.

3 MEMBER DOERR: Randy, then Dave?

4 MEMBER CATES: A couple of points.

5 The first point is, I'm only going off of
6 what's on the page so if we're going to go
7 ahead let us know.

8 MEMBER DOERR: Let's start working
9 off of the first --

10 MEMBER CATES: The first five?

11 MEMBER DOERR: The first, what you
12 can see on the screen there. The first two.

13 MEMBER CATES: Okay. So I just
14 want to make sure that we're -- I want to put
15 this in context of what we went through when
16 the original draft came about.

17 And believe me, there was a room
18 full of people that were not very warm and
19 fuzzy about aquaculture. But as time went on
20 it shifted to the point where very strong
21 language was needed for where this document
22 was going, and the document was going to who

1 we report to, the Secretary of Commerce, and
2 the need for aquaculture.

3 So as you go through this and you
4 see some very strong language, please keep in
5 mind that that was on purpose. The committee
6 came to the conclusion that it needed to be
7 because so much misinformation about
8 aquaculture.

9 Aquaculture was taking a backseat
10 for so long that it needed to be up front and
11 center, and I still think that that needs to
12 be that way today. That's what the MAFAC
13 original members came to the conclusion where
14 it was placed, the language. It may seem
15 heavier than other sectors. There was a
16 purpose for that.

17 MEMBER DOERR: Dave, then Keith?

18 MEMBER WALLACE: I agreed with
19 Bob's comments, and I think that that's
20 probably what this document should say. Thank
21 you.

22 CHAIR RIZZARDI: One of the things

1 that MAFAC is usually pretty good at as a
2 result of our consensus body is achieving
3 measured language. You know, we usually
4 moderate the really strong stuff, sometimes
5 incorporate alternative perspectives.

6 The two bullets, I agree with the
7 first bullet. I think the first bullet is
8 fine. There's truth in the second bullet as
9 well. In fact, the second bullet to some
10 extent is already agency policy, if you think
11 about what happens in the Pacific Northwest
12 and the way we have hatcheries and how we try
13 to make sure that the hatchery-bred salmon
14 aren't genetically interfering with the
15 endangered species of salmon that are in the
16 Pacific Northwest.

17 So maybe there's an opportunity to
18 put some measured language on the second
19 bullet and retain it while at the same time
20 reverting back to the language of the first
21 bullet.

22 MEMBER DOERR: Are your comments

1 specifically to these bullets? Okay.

2 MEMBER CATES: The problem with
3 that is it's a tool that's misused often
4 towards aquaculture. All sectors of fishing,
5 there are already rules and laws in place that
6 do specifically what this says. By having to
7 restate it and restate it throughout, we don't
8 do that in other sectors through our
9 commercial fishing sector, throughout the
10 document.

11 And this came out in the original
12 part where it was almost like alarm bells
13 going off as the Secretary of Commerce would
14 read the document. So there are already
15 current laws within NOAA that do exactly that.

16 And the question is, do we have to
17 keep on restating and restating it? And is
18 the purpose of restating it to raise concern
19 for the person that's reading this? And we
20 don't do that throughout the document in other
21 sectors, so that would be my objection to
22 doing that. I have no problem with the

1 language, but it is not necessary.

2 MEMBER DOERR: Okay, Randy and
3 then Julie, and then I'm going to make a
4 suggestion for these two bullets and move
5 forward.

6 MEMBER RHEULT: I have a
7 suggestion, to finish it.

8 MEMBER DOERR: I'm sorry.

9 MEMBER RHEULT: I'm proposing
10 language here that would say we should
11 continue to enforce the laws that exist that
12 protect wild stocks from genetic pollution.
13 If you want to have that language in there, I
14 just want to hammer home the fact that it's
15 already in law. Thank you.

16 MEMBER DOERR: Did you want to say
17 something, Mark?

18 DR. HOLLIDAY: Sometimes I just
19 need to make an intervention because the
20 committee has already endorsed previously the
21 NOAA and DOC aquaculture policies that speak
22 directly to protecting from genetic pollution,

1 that speak to those things that are red-lined
2 there for creating jobs and supporting coastal
3 communities. That's language that's in the
4 policy for NOAA and the Department.

5 So I'm just, I want the committee
6 to be consistent when it's choosing to include
7 or not include things, to be consistent with
8 its prior, this was June of last year,
9 decisions about whether or not we felt the
10 policies were valid and, in fact, you helped
11 create the content of the policy.

12 So it's just an intervention to be
13 mindful of where you come from in supporting
14 previous statements to the --

15 MEMBER DOERR: Thank you. And
16 that's --

17 (Off microphone discussion)

18 MEMBER DOERR: Yes. To move us
19 forward here, I'm going to recommend in the
20 first bullet we retain the original language
21 and delete the MLE.

22 In regards to the second bullet,

1 it sounds like we have, are folks okay with
2 taking back out that second bullet? Okay.
3 You can delete, yes, delete the second bullet,
4 and then moving down.

5 So the second and third bullet, to
6 go back to what Mark just said about staying
7 consistent with what we've previously said,
8 then I would suggest that we also revert back
9 to the original language on the second and
10 third bullet. Paul?

11 MEMBER CLAMPITT: On the second
12 bullet, the U.S. government should prioritize?
13 I mean we'd all like to have priority.

14 (Simultaneous speaking)

15 MEMBER RHEAULT: That was in the
16 existing language from the Vision document
17 2020, version one.

18 MEMBER CLAMPITT: Prioritize? I
19 don't think I was involved in that
20 unfortunately, so thank you. I wasn't here
21 then. So just that aquaculture shouldn't get
22 grants, and I'm not suggesting that they

1 should, I just think that "U.S. government
2 should support aquaculture and grant other
3 financial assistance" would be more
4 appropriate from "prioritize." That's all I'm
5 suggesting.

6 MEMBER DOERR: Heidi, could you
7 reinsert those two bullets so we can work off
8 of them?

9 MEMBER DOERR: Thank you. Randy?

10 MEMBER CATES: Regarding that last
11 bullet point --

12 MEMBER DOERR: Well, can we stick
13 to the second and third bullet point?

14 MEMBER CATES: Oh, I thought we
15 were beyond that.

16 MEMBER DOERR: I'm sorry. Paul
17 has suggested a word change to "prioritize."

18 MEMBER CATES: Should support.
19 That's specifically what I'm referring to.

20 MEMBER DOERR: Oh, I'm sorry. I
21 thought you were going down to the last point.

22 MEMBER CATES: I think the

1 language should remain as it is. It is
2 already policy within the law. When you go to
3 get financial assistance the highest priority
4 is for aquaculture. And it's a struggle.

5 It's a real struggle for any
6 aquaculture facility to qualify for financial
7 assistance. I think if the language was taken
8 out it would be virtually nonexistent, the
9 opportunity, because we are a new industry and
10 we're different.

11 You know, I remember going through
12 the financial loan program through NOAA, and
13 they flat out told me, if you were a longliner
14 this would be an easy case. But only because
15 the language that they had to work off was
16 that it had the highest priority as mandated
17 by Congress that they were able to work
18 through and make it happen. If that's taken
19 out, I think the opportunity would be
20 virtually nonexistent for any venture.

21 MEMBER DOERR: Any other comments
22 on Paul's suggestion? Do you have any

1 thoughts on --

2 MEMBER CLAMPITT: Apparently it
3 isn't getting too much traction, so I'm fine
4 in the, you know, leaving it the way it is.

5 MEMBER DOERR: Tony?

6 MEMBER CHATWIN: I hear what Paul
7 is saying. I don't hear him disagreeing that
8 there should be more financing available to
9 aquaculture. It's just the way it's stated as
10 I understand it. Because I could see the rec
11 sector, recreational section of this saying
12 recreational fishing should be prioritized in
13 grant making, then the commercial sector will
14 want the same, right, and I would say habitat
15 should be prioritizing grant making.

16 So I think that's the issue. It's
17 just inadvertent consequence. So maybe
18 there's a way to say that, well, I don't have
19 specific language yet, but --

20 MEMBER DOERR: Bob, and then I'll
21 make a suggestion to move forward.

22 MEMBER RHEAULT: I would just say

1 that, you know, this is a very young industry
2 and it is in need of support, and that was
3 existing language from the version one of the
4 2020 and I didn't mess with it. I didn't
5 insert my own feelings on it, but I still
6 think that priority is needed.

7 MEMBER DOERR: I'm going to
8 suggest we move that to a lunchtime discussion
9 for you guys, and sort of keep it as is right
10 now since I'm not hearing a very strong desire
11 to change it. You guys can talk off line to
12 see if there's another word you want to use
13 besides "prioritize."

14 CHAIR RIZZARDI: To help with that
15 discussion I just want to suggest that you go
16 back to the aquaculture plan which has a
17 section in it discussing the social and
18 economic benefits of aquaculture, and you can
19 probably mirror some of the language from
20 there and incorporate it here.

21 MEMBER DOERR: Bob, can you remind
22 me on the last two bullets there? The second

1 to the last bullet is just sort of tightening
2 up the language and making a clarification.

3 MEMBER RHEAULT: So again, the red
4 line is Michelle's suggestion to delete my
5 clarification that this can be achieved
6 through existing U.S. laws and regulations.

7 I guess I don't really have a
8 problem with the alternate language of
9 enforcing existing regulations to meet these
10 goals. It says the same thing.

11 MEMBER DOERR: Are folks okay with
12 that? Randy?

13 MEMBER CATES: I'm fine with that.
14 But the first bullet that she took out, I
15 think, should remain in there. I want to make
16 sure I'm on the right place here.

17 MEMBER RHEAULT: Domestic
18 aquaculture industry?

19 MEMBER CATES: Yes.

20 MEMBER RHEAULT: I think that's
21 back.

22 MEMBER DOERR: It is.

1 MEMBER CATES: Okay, it's back.

2 Fine.

3 MEMBER DOERR: And then the
4 recommendation was to include, Tony had
5 recommended to keep Bob's new bullet at the
6 very end.

7 So just to clarify on the second
8 to the last bullet, we would keep the enforced
9 existing regulations and implement regulations
10 that meet these goals, and then keep the last
11 bullet that Bob has added.

12 Ted?

13 MEMBER AMES: I have a little
14 concern on the second bullet because I think
15 Tony's perceptions were on point. Perhaps the
16 U.S. government should consider prioritizing
17 rather than making it such an absolute.

18 MEMBER DOERR: We were going to
19 have offline conversations over lunch to see
20 if there was better wording for that. So that
21 will remain open.

22 Tony?

1 MEMBER CHATWIN: And it's a
2 question really. That last bullet, and from
3 my perspective is one of the most important
4 ones, shouldn't it be the first bullet?

5 MEMBER RHEAULT: Okay. I support
6 that.

7 MEMBER DOERR: Excellent.

8 Okay, moving on. Columbus?

9 MEMBER BROWN: Before you move to
10 another section, going back to the section
11 where they talk about their trade deficit,
12 it's on Page 14, and it was suggested that
13 they change that language. The --

14 MEMBER DOERR: Are you in the
15 recommendations? Where are you at? I'm
16 sorry.

17 MEMBER BROWN: Yes. Page 14,
18 under domestic aquaculture industry.

19 MEMBER DOERR: Okay, yes.

20 MEMBER BROWN: Okay, the language
21 is, "our national \$10 trillion seafood trade
22 deficit." Well, the trade deficit is not \$10

1 trillion. It's \$42 billion.

2 And if you're talking about the
3 \$10 trillion, that's a totally different
4 number. That's our budget deficit. And if
5 you change that number to the seafood deficit
6 then you'll need to get the right number from
7 NOAA to indicate what percentage of the
8 overall trade deficit that represents.

9 MEMBER DOERR: Thank you. We'll
10 work with NOAA to update that number.

11 CHAIR RIZZARDI: I just want to
12 double check on the movement of that bullet
13 and where it ended up.

14 MS. LOVETT: It ended up at the
15 bottom.

16 (Off microphone discussion)

17 CHAIR RIZZARDI: I wanted to
18 suggest that it be the second bullet instead
19 of the first, because the first bullet, I
20 think, still remains, "the U.S. should
21 continue to support a domestic,
22 environmentally sound aquaculture industry."

1 And then the next concept should be, go get
2 legislation that would do that.

3 (Off microphone discussion)

4 CHAIR RIZZARDI: The green
5 language simply moves below and becomes an
6 independent second bullet.

7 (Off microphone discussion)

8 MEMBER DOERR: It should be, make
9 it the second bullet, total? So it should be
10 after, "the United States must prioritize a
11 domestic, environmentally sound," et cetera.

12 (Off the record comments)

13 MEMBER DOERR: Okay, we have until
14 12:00 or 12:15, Mr. Chairman? I have two
15 different agendas. Okay, we have six minutes.
16 Five minutes to move on down to the second
17 climate change issues. Top of Page 18, Heidi.
18 Right there.

19 So I'm actually going to recommend
20 something here. Paul and I have been talking
21 about this section of how to have it read in
22 such a fashion that addresses both what

1 regions are seeing when it comes to changing
2 oceans versus sort of overall and some of the
3 blanket, the direct statements that Paul has
4 spoken to before.

5 So I will volunteer to work with
6 Paul to have specific changes to this for us
7 to look at tomorrow morning. And as I say
8 that, is there anything else that, any issues
9 people want to raise with this paragraph that
10 Paul and I can consider? None?

11 FEMALE PARTICIPANT: Give us a
12 little more time.

13 MEMBER DOERR: Okay. Yes, Tony?

14 MEMBER CHATWIN: I have a
15 question.

16 (Off microphone discussion)

17 MEMBER CHATWIN: Starting with
18 this paragraph. But I'm not sure where in the
19 document to insert this, and I'm happy to have
20 this discussion tomorrow.

21 But there is, "although great
22 strides have been made in terms of reducing or

1 eliminating overfishing of the stocks of which
2 the status is known, there is still about 50
3 percent of the stocks of which the status is
4 unknown."

5 And I would like to include
6 language, and I can provide it tomorrow, in
7 the appropriate section that calls for NOAA to
8 continue lowering the number of unknown
9 stocks, or the number of stocks of which the
10 status is unknown.

11 MEMBER DOERR: I think that would
12 probably go into the first section, the
13 Sustainable Fisheries. So at this point from
14 my tally we have a couple of smaller, holdover
15 issues for tomorrow morning.

16 So in terms of next steps, I will
17 work with Heidi to clean this up as much as
18 possible and send it back around for folks to
19 be able to look at. But we have my list, my
20 tally of issues that folks need to get
21 together on either at lunch, during a break or
22 at the end of the day today.

1 I'm hoping each of these issues
2 won't take folks a lot of time, just ten
3 minutes of discussion. There's some
4 clarifications and questions in the
5 recreational fishing section, Ken, that we
6 deferred until you were able to join us to
7 provide some guidance as the discussions with
8 the subcommittee and the working group. So I
9 can fill you in on those.

10 For the ocean acidification and
11 corals, I am going to work to split out that
12 trend of how we talk about the threats to
13 corals and ocean acidification. Paul and I
14 are going to work on the sea level rise.

15 Tony is going to have some
16 language on unknown status of stocks. Keith
17 has some language on protected resources and
18 habitat. Am I missing anything?

19 (Off microphone discussion)

20 MEMBER DOERR: And prioritize, the
21 aquaculture discussion.

22 Keith?

1 CHAIR RIZZARDI: Yes, I had one
2 other thing. In the cross cutting area to
3 ocean governance, I've had a sidebar with
4 Tony.

5 Based on our last meeting, we
6 already came up with as a body a statement on
7 our views about NOAA as the premier ocean
8 agency. And recognizing that the big concept
9 of reorganization is still out there, my
10 thought was that we might be able to tweak our
11 prior statement and incorporate some language
12 on NOAA's primacy in this role.

13 MEMBER DOERR: That would be
14 great. Julie?

15 MEMBER MORRIS: During the
16 discussion this morning I received suggestions
17 from both Tony and Keith on rewrites on two of
18 the bullets under protected resources and an
19 additional bullet under protected species,
20 protected resources recommendations. So I've
21 worked that in as a draft and we can look at
22 it tomorrow.

1 MEMBER DOERR: Thank you. So if
2 everybody who I have flagged can get language,
3 send it to Heidi and me and we will work to
4 incorporate it into the document, and then
5 hopefully by the end of the day have a fresh,
6 clean document for people to look at that only
7 has track changes for this new language that
8 we still need to talk about. Everything else
9 is going to be clean.

10 So I'm going to again ask and
11 request that everybody make sure you take the
12 time to read it and that it is a document
13 everybody can support when we finish up
14 discussion tomorrow morning.

15 Keith, Mark, did you guys want to
16 add anything in terms of process or thoughts?

17 CHAIR RIZZARDI: So for tomorrow
18 we've got subcommittees for Commerce and the
19 ESA group from 8:30 to 9:30.

20 The Commerce group, I don't know,
21 did you guys finish where you need to be with
22 the development of a plan for -- you will

1 meet, okay.

2 So then 9:30 we've got an update
3 on conservation and management from Eric, and
4 at 10:15 we've got a slot for Vision 2020
5 which is slated for an hour, 45. Well,
6 actually it's more. It's two hours, 15
7 minutes for final discussion and ratification
8 of Vision. So that's what we'll have left.

9 So sidebar as much as you can.
10 Get as much of that language clean, let's see
11 if we can work out our compromises and then be
12 able to take that language and we'll have a
13 little over two hours to bang that out.

14 MEMBER DOERR: Everybody will get
15 gold stars if we can do it in an hour.

16 MEMBER RHEAULT: I would just like
17 to say thanks to Patty.

18 (Applause)

19 MEMBER DOERR: Thank you, guys,
20 for working so hard. Mr. Chair, I'm going to
21 back it over to you. Would you like the
22 gavel?

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

CHAIR RIZZARDI: No, let's go get
lunch.

(Whereupon, the foregoing matter
went off the record at 12:02 p.m. and went
back on the record at 1:10 p.m.)

1 There's a lot of people
2 participating in this session who aren't in
3 the room, so I'd like to give them a chance to
4 introduce themselves so we know who's joining
5 us at a distance. So if you are not in the
6 room and are participating, could you please
7 introduce yourself now? Is there a way to do
8 that?

9 Okay, so on the phone, is anyone
10 here from the West Pacific Region?

11 (Off microphone discussion)

12 MS. VAN ATTA: This is Lisa Van
13 Atta from the Pacific Islands Regional Office
14 of NOAA Fisheries.

15 MEMBER MORRIS: Lisa?

16 Okay, anybody else from Western
17 Pacific NOAA staff? And then what about the
18 Western Pacific Fishery Management Council?

19 MS. ISHIZAKI: Hi, this is Asuka
20 Ishizaki. I'm a Protected Species Coordinator
21 for the Western Pacific Council. Paul
22 Dalzell, who will be presenting, will be here

1 very shortly.

2 MEMBER MORRIS: Okay. Mark just
3 pointed out that we're projecting a list of
4 those who are on, but I would like everybody
5 who's on to have a chance to introduce
6 themselves as well.

7 Okay, anybody here from the North
8 Pacific?

9 MS. CAMPBELL: This is Cora
10 Campbell. I'm a member of the North Pacific
11 Council and also a commissioner of the Alaska
12 Department of Fish and Game.

13 MEMBER MORRIS: Welcome, Cora.

14 Anyone else from the North Pacific
15 Council or the North Pacific NOAA staff? No?
16 And what about Pacific?

17 MR. WOLFORD: Yes, this is Dan
18 Wolford. I'm the Chairman of the Council.

19 MEMBER MORRIS: Welcome, Dan.
20 Anyone else?

21 MR. TRACY: This is Chuck Tracy.
22 I'm the Deputy Director of the Pacific

1 Council.

2 MEMBER MORRIS: Welcome, Chuck.
3 Anyone else from the Pacific Council or
4 Pacific NOAA staff?

5 Is there anyone on from the Gulf
6 of Mexico?

7 MR. ANSON: This is Kevin Anson,
8 Vice Chairman.

9 MEMBER MORRIS: Good to hear your
10 voice, Kevin.

11 MR. ANSON: Nice to hear yours,
12 Julie, thank you.

13 MEMBER MORRIS: Anyone else from
14 the Gulf Council? And what about the South
15 Atlantic? How about the Mid-Atlantic or New
16 England? Puerto Rico and the Virgin Islands?

17 Okay, so is that everybody who's
18 listening in at distance has had a chance to
19 introduce themselves, did we miss anyone?
20 Thank you, all.

21 And then I would like to introduce
22 the members of the working group since we'll

1 be meeting at the end of the day, and I just
2 wanted everybody to know who the working group
3 members were.

4 So from MAFAC it's Columbus Brown,
5 Paul Clampitt, Pam Yochem and myself. From
6 National Marine Fisheries Service it's Gina
7 Shultz, David Bernhart, both here on my right,
8 and Marian MacPherson here.

9 And then from the CCC, the Council
10 Coordinating Council, we have Corky Perret
11 from the Gulf Council, but Kevin Anson is
12 sitting in for him today.

13 We have Cora Campbell from the
14 North Pacific, Ed Ebisui from the Western
15 Pacific, and he can't be here with us because
16 he's at new council member training session,
17 and then Dan Wolford from the Pacific.

18 Okay, so we are having this
19 webinar in order to try to work on identifying
20 best practices in the consultations on Section
21 7 ESA with regional Fishery Management
22 Councils, and we're looking for best

1 practices.

2 We're looking for potential areas
3 for improvements in the consultations both in
4 how the buy-ups are written and developed, the
5 types of information and analytical methods,
6 as well as improvements in the process of
7 consultation, better coordination of those
8 processes.

9 So all of these good people who
10 have prepared background and introductory
11 materials for us today are going to be
12 providing some commentary on those subjects,
13 and our job is to try to identify throughout
14 best practices going forward and ways to
15 improve the process and better coordinate the
16 process.

17 So with that I'd like to introduce
18 Helen Golde who is the Acting Director of the
19 Office of Protected Resources, and she's going
20 to be assisted by Craig Johnson who's the
21 Protected Resources Fisheries Biologist, and
22 Marian MacPherson who is a Management and

1 Program analyst with Sustainable Fisheries.

2 So Helen?

3 MS. GOLDE: Thanks, Julie. I'll
4 be really brief because I want to leave time
5 for Marian and Craig to talk about the nitty-
6 gritty. So I just have a very few
7 introductory remarks.

8 I think we all know that there's
9 often consternation and confusion around
10 biological opinions that the Fisheries Service
11 does on fisheries management actions.

12 We, as you all know, I think, are
13 consulting with ourselves in that realm
14 because NOAA Fisheries is the action agency
15 and is proposing to take an action, so the
16 Sustainable Fisheries side and then the
17 Protected Resources side we do a consultation
18 with ourselves.

19 But obviously the Councils are the
20 ones who have worked long and hard on those
21 proposed plans and so how you all fit in the
22 process is, I think, part of the discussion

1 here.

2 So I want to thank everybody for
3 keeping an open mind and sort of thinking
4 about ways that we can move forward
5 collectively and, you know, think creatively
6 about ways to get us all working better
7 together and increase that communication and
8 collaboration there.

9 I will note that we have some, of
10 course under the Endangered Species Act as
11 well as the Magnuson Act, some legal
12 constraints about what we can and can't do and
13 various timelines and things. And so as the
14 working group moves forward, I encourage you
15 to rely on the Fisheries folks who are on that
16 workgroup to check in on whether things that
17 you're proposing and thinking about are legal.

18 And we don't have any of our
19 attorneys in that working group purposely to
20 keep that conversation flowing, but I also
21 want to make sure that people don't go down a
22 path that we then shut a door on later and

1 say, thanks for your hours and hours of hard
2 work of coming up with this idea, but actually
3 we can't legally do that. That's not a good
4 use of anybody's time.

5 So I look to Gina and David and
6 Marian to sort of keep that check and make
7 sure that we're not going down a road that we
8 legally can't go down.

9 That said, I really just want to
10 reiterate how much I encourage everybody to
11 think creatively in this process. And then
12 lastly I'll just say, I think, I hope the case
13 studies that have been put together for you
14 all this afternoon are helpful.

15 They're designed for you to see a
16 few examples of how consultations worked and
17 what was done on consultations on various
18 fisheries management actions. I think there's
19 probably a range of ideas around whether that
20 was good or bad or what could have been
21 improved in those. And when asking questions
22 about those I encourage you all to keep those

1 questions with the sort of fact based, what
2 did you do this or did you not do this, I
3 don't understand as opposed to getting into
4 the why did you do it this way, this was wrong
5 kind of questions. I want to keep the
6 conversation and get as much information out
7 there and not put anybody on the defensive
8 right away.

9 So with that, that's really all my
10 opening comments, so I'll turn it to Marian to
11 talk about her perspective from the Fisheries
12 Management standpoint.

13 MS. MACPHERSON: Thanks, Helen.
14 Thanks for having me. As Helen said, I'm
15 going to try to just simply frame the issues
16 where our constraints under Magnuson come in
17 and where they bump against the ESA in ways
18 that create challenges.

19 I'm operating under the
20 understanding that you guys all have a pretty
21 high familiarity in level of understanding
22 with Magnuson, but if you have any questions

1 about what I'm saying just let me know and
2 I'll try to fill in the gaps.

3 But basically thinking of the
4 fishery management action under the Magnuson
5 Act as the federal action, which is subject of
6 an Endangered Species Act consultation really,
7 you can see from this slide that it's a two-
8 part process.

9 The recommendation process at the
10 Council level is really where all of the
11 analysis is going into, what's being planned,
12 all the alternatives are being considered.
13 Those are the times when actions can be
14 tweaked and changed.

15 As it gets into the Secretarial
16 review, the actual agency action, we are going
17 to be constrained by Magnuson Act's timelines
18 and limitations on our discretion, and then
19 there would be the rulemaking following on
20 whatever the decision is at the Secretarial
21 level.

22 (Off the record comments)

1 MS. MACPHERSON: Okay, so just to
2 lay out in more detail the requirements at the
3 Secretarial level, Magnuson Act imposes the
4 95-day timeline, which is a limit. That's a
5 deadline from the date of transmittal when an
6 agency decision has to be made.

7 If we don't make a decision it's
8 automatically approved on FMPs. And the scope
9 of the review is also limited by the Magnuson
10 Act. We can approve, disapprove or partially
11 approve, but we cannot change what has been
12 recommended to us.

13 And the criteria for making that
14 approval or disapproval is very narrow as
15 well. The basis for review is to determine
16 whether the recommendation complies with
17 national standards, includes all the required
18 components, complies with other applicable
19 law, and this is very important.

20 ESA and NEPA are big interactions
21 here for us, and the only reason for
22 disapproval is inconsistency with one of those

1 requirements so it can't just be we want to
2 have a better idea go into effect.

3 So again just to lay it out what
4 the statutory and regulatory requirements are
5 under the Endangered Species Act, we have to
6 ensure that what we're doing under Magnuson
7 does not jeopardize a listed species or
8 adversely modify critical habitat.

9 The timing for Endangered Species
10 Act consultations starts out at 135 but that
11 can be extended. So, you know, looking just
12 at those two timelines, you don't want to
13 start the consultation at the same time you
14 transmit the Magnuson Act action because we
15 would have to decide before the consultation
16 could be completed.

17 So when do you start your
18 Endangered Species, that consultation?
19 Looking down in the chart at the bottom,
20 consultation cannot begin until a preferred
21 action has been identified and a request for
22 initiation has been submitted. And then that

1 starts that minimum clock of 135 days.

2 So looking at the Council process,
3 that's going to be a very late point in the
4 Council process where an action is close
5 enough to final that it's likely to be
6 proposed and a written request for initiation
7 of consultation can occur. This also sets out
8 what triggers the start dates for the Magnuson
9 FMPs and the Magnuson Act regs.

10 So basically to sum up, these are
11 our conflicts that we have from statutory and
12 regulatory requirements. Section 7 can't
13 begin until there's a proposed action. NOAA
14 has no ability to change the recommendation
15 after the Council process.

16 So there's a need to be exchanging
17 information early on, earlier than the formal
18 consultation can begin about the potential
19 impacts to listed species so that the Council
20 can recommend actions that don't cause
21 jeopardy and we don't have to make a jeopardy
22 determination during Secretarial review.

1 And just to let you know, some of
2 you may know this already, this situation is
3 not new to us. We've been aware of it. We've
4 been working on it for a long time. Different
5 ideas have been floated around.

6 We had draft operational
7 guidelines that came out in 2005 that put out
8 some ideas for dealing with those timing and
9 logical interaction issues, and those are some
10 good ideas. There may be some things that we
11 can work with in there and it may be worth
12 taking a look.

13 So that said, I'm going to turn it
14 over to Craig who has been working on
15 providing early information, and he's going to
16 talk about some of the practical and
17 logistical constraints in addition to the
18 statutory and regulatory ones I just
19 mentioned.

20 Do you want this or do you have
21 something up there that --

22 (Off the record comments)

1 MR. ANSON: Julie?

2 MEMBER MORRIS: Yes, who is this?

3 MR. ANSON: This is Kevin Anson.

4 There's several of us on that are
5 participating via webinar that cannot see any
6 of the slides.

7 MEMBER MORRIS: Okay, let's see if
8 we can solve that problem on our end.

9 MR. ANSON: Thank you.

10 (Off the record comments)

11 MR. JOHNSON: So I just wanted to
12 briefly go through the Section 7 requirements.
13 And as Marian said, I'm assuming, I was told
14 that people are generally familiar with the
15 requirements of the Endangered Species Act and
16 particularly Section 7.

17 So I just have a few calibrating
18 slides and then get into some more of the meat
19 of the matter. And this is the purposes of
20 the Endangered Species Act, which is the
21 conservation, first, of the ecosystems on
22 which species depend, and then second, of the

1 species themselves.

2 And particularly for us there are
3 two sections that are relevant here. We tend
4 to focus on the jeopardy component of Section
5 7 which is Section 7(a)(2). But Section
6 7(a)(1) applies to us as well. It contains a
7 very explicit mandate for any programs under
8 the authority of the Secretary of Interior and
9 Secretary of Commerce.

10 So because we're consulting on
11 actions that are our own actions, there isn't
12 only the avoidance of jeopardy requirement,
13 there's also the compliance with Section
14 7(a)(1) that applies as well.

15 And that requires a showing that
16 we're using our authorities to further the
17 purposes of the Endangered Species Act, which
18 is to conserve the ecosystems and species that
19 depend on those ecosystems.

20 But the meat of it, and what most
21 people focus on with Section 7 is this
22 requirement. It's the one that creates all

1 the buzz and most of the litigation and most
2 of the tension, is this fairly simple mandate
3 that obliges each agency, in this case it
4 would be Sustainable Fisheries, if they're
5 taking the action on a fishery, to ensure that
6 that action is not likely to jeopardize the
7 continued existence of threatened species or
8 endangered species or destroy or adversely
9 modify designated critical habitat.

10 Another piece that's important for
11 anybody deliberating on the jeopardy standard
12 or how it should work is to remember the
13 standards of review. Prior to 1994, Section
14 7 consultations were reviewed under the
15 standards of the Endangered Species Act.

16 Since then and it was a case of
17 Bennett v. Spear, a Supreme Court case, they
18 codified the standards of review or the
19 Administrative Procedure Act which are these.
20 They applied the arbitrary and capricious
21 standards of the Administrative Procedure Act,
22 and these four requirements are important

1 considerations in determining whether or not
2 a consultation has been successful, which is
3 critical for showing in the record, and we end
4 up having to build a fairly extensive record
5 to support these consultations.

6 In 2001, or by 2001, we had sort
7 of a major meltdown as an agency. We had
8 injunctions against the groundfish fisheries
9 in Alaska, injunctions in Hawaii, injunctions
10 in the North Atlantic with the highly
11 migratory species, and there were about 130
12 fisheries of various kinds that had gotten
13 entangled with the Endangered Species Act,
14 particularly Section 7.

15 We had a closing the gap
16 conference, which was an attempt to internally
17 reconcile some of these disputes, and to top
18 it all off, the Senate, in our appropriations
19 language, directed us to kind of come to some
20 more harmonious treatment of Section 7 and
21 Magnuson.

22 And I was directed to come to a

1 respond to that and really was to design some
2 transparency and clarity to the consultation.
3 There's a lot of angst associated with the
4 jeopardy standard.

5 And then Director Hogarth asked me
6 or directed me to propose some approaches for
7 providing some clarity and transparency, some
8 linearity to the process. So this is the
9 results.

10 The assessment framework that we
11 use and teach, it's not codified as official
12 policy. We haven't amended our regulations
13 for this, but it is codified as policy that's
14 taught to all consulting biologists and action
15 agencies.

16 And what you see are two shaded
17 boxes. As Marian said, the process for us
18 can't begin until we have some clarity on
19 what's being proposed, what's the action
20 agency planning to do?

21 And we've had for years attempts
22 to, I think, West Pac at one point wanted to

1 have us look at something like 16 different
2 possible alternatives in the NEPA document
3 which it's effectively impractical for us to
4 do.

5 So as Marian captured, a critical
6 point of tension is our process begins once we
7 know what it is we're supposed to be
8 assessing, then we break it into its various
9 parts.

10 And the second piece, the
11 deconstruction, largely resulted over the
12 disputes over the Alaska groundfish fishery,
13 where in the second round we were required to
14 go back and redo our homework because we had
15 omitted pieces of the larger FMP. So the
16 deconstructing is to make sure we don't lose
17 track of any of the pieces.

18 Then we have action area exposure
19 response. All of those are things that we
20 didn't have prior to 2001. It was how we went
21 about our consultations was not a linear
22 process. I wouldn't have been able to explain

1 to you or articulate how we go through the
2 thought process.

3 By articulating it as we teach it
4 to our staffs, those processes are
5 interactive, they should involve action
6 agencies, applicants, other stakeholders as
7 applicable.

8 Similarly, the setting up the
9 environmental baseline, the status of the
10 species and cumulative effects, which for us
11 is very different than the meaning the term is
12 given in NEPA. For us it's only the impacts
13 of future state, local, tribal or private
14 activities. These are not future federal
15 activities that are part of that
16 consideration.

17 The other thing that we do for the
18 boxes that are labeled red, which is the risk
19 sequence, is make certain that the record,
20 that our determinations at any step in that
21 sequence were not unduly influenced by the
22 needs and interests of the action agency or

1 the applicant or other stakeholders. To show
2 that our analysis and our conclusions at each
3 step was based on biology and not other
4 considerations that in the past have gotten us
5 cross-wise of plaintiffs in court cases.

6 To break those down and to make
7 those clearer, we've broken them down into a
8 series of steps, a series of propositions that
9 we ask and answer based on evidence.

10 And this is the sequence for
11 threatened or endangered species beginning,
12 there's an earlier piece that we apply if
13 there's permitting involved. An intentional
14 and purposeful take of threatened or
15 endangered species is what the first one deals
16 with. Generally doesn't apply to most agency
17 actions.

18 And as you can see here it begins
19 with, are there stressors? It matches very
20 well with the framework that I described a
21 moment ago, and goes through to what you have
22 on the far right side where we're asking is

1 the question true or false, do we accept this
2 proposition as true or false based on the
3 strength of the evidence, considering evidence
4 for it and evidence against it? Then you have
5 the actions.

6 The ending, the NLAA that's on the
7 right hand side is for our purpose, it's not
8 likely to adversely affect. Those are actions
9 that we can conclude informally. And we have
10 three different reasons for not likely to
11 adversely effect determinations.

12 And then the piece that's
13 highlighted in yellow is the main focus of
14 this group where you're asking the jeopardy
15 question, the consideration of the population
16 and species level.

17 One thing to remember, all of our
18 determinations have to be against the species
19 as it has been listed. We've had challenges
20 in the past where agencies or plaintiffs have
21 argued that we didn't properly base our
22 jeopardy determination on the listed entity,

1 that we based it on some subcomponent.

2 The specific cases were in the
3 Atlantic. There was a second one in the
4 Pacific, where the argument was we didn't
5 properly make our jeopardy determination
6 against loggerhead sea turtles and
7 leatherbacks, who at the time were listed
8 globally. That we had instead made the
9 determination against loggerheads and
10 leatherbacks in the Atlantic or the Pacific,
11 not the global listing.

12 So our determinations, first, of
13 species is referenced to the listed entity
14 whatever it happens to be. Cook Inlet beluga
15 as opposed to all beluga.

16 And second, our jeopardy
17 determinations have to be against that listed
18 entity. We're asking it at that level. And
19 we have a similar set for critical habitat,
20 which is a shorter list.

21 For critical habitat these are
22 pure habitat-based analyses. We don't insert

1 the species. The point of reference for the
2 critical habitat determinations is the value
3 of critical habitat for the conservation of
4 the species.

5 Another thing to remember for
6 critical habitat as you deliberate, you might
7 be inclined to read the definition of
8 destruction or adverse modification that's in
9 our Section 7 regulations or in the code of
10 federal regulations.

11 I would recommend you not do that.
12 That definition has been ruled facially
13 invalid since 2001. In each of our opinions
14 we have to explicitly say we're aware that
15 that definition exists, we're not using it.
16 So please, as you deliberate don't use that
17 definition because it's facially invalid.

18 We've been trying to replace it
19 with a new definition for 11 years and we're
20 still trying, for a variety of reasons.
21 Instead what we use is the value of the
22 designated area for the conservation of the

1 species which is a recovery test.

2 What is our probability? What
3 contribution does the habitat make to our
4 ability to bring the species off of the
5 endangered species list? And that's the point
6 of reference. It's a default back to the
7 definitions that's in the Endangered Species
8 Act.

9 The problem we have with that is
10 for our purposes our point of reference is,
11 what's the value of the area that has been
12 designated? Sometimes it's very high.
13 Sometimes it's very low. We can't add value
14 in consultation. We can only ask, is the
15 action likely to reduce whatever value has
16 been designated?

17 Generally we think in terms of
18 what is the maximum density of the area that
19 has been designated can sustain indefinitely.
20 It's the equivalent of a carrying capacity
21 type of concept.

22 There are several errors that

1 agencies commonly make in consultation. They
2 are listed here. One of the biggest ones and
3 points of tension that we get into with
4 fishery consultations has been not being clear
5 of what exactly is the action we're consulting
6 on.

7 It's often a moving target and
8 there are often revisions and versions as we
9 go through it, and that can run out our clock
10 fairly well and then it becomes a point of
11 tension between the two programs and the
12 Councils.

13 There are other components of it.
14 Another piece is that clear articulation that
15 any FMP or planned document, making it clear
16 whether and to what degree those documents
17 have been based on and considered the best
18 scientific and commercial data available.
19 That's another point of tension between our
20 two, of the two programs.

21 And just to close with the three
22 main points of tension that seem to have

1 followed consultation on fisheries. The first
2 is the time constraints, as Marian had
3 referred to. The tension between the 90 days
4 for a consultation that can be extended as
5 necessary or appropriate, and the 95-day limit
6 on the FMPs.

7 The second is, the Councils tend,
8 there's been a push to want sort of fixed
9 targets, the equivalent of PBR-style targets.
10 There's a separate discussion led by the
11 Southwest Fisheries Science Center to develop
12 fixed targets for sea turtles. For example,
13 PBR for sea turtles, whereas -- yes?

14 (Off microphone discussion)

15 MR. JOHNSON: Potential biological
16 removal. How many individuals can be removed
17 without affecting the trajectory of the
18 population or its ability to recover.

19 The problem with consultations is,
20 we're required to consider, our assessments
21 are always context specific and circumstance
22 specific and we're required to update that

1 context with each new consultation.

2 And that requires us to consider
3 things like climate change, sources of
4 mortality or reductions in fitness completely
5 unrelated to fisheries. And because of those
6 phenomena it's hard for us to set a fixed
7 target that we can then apply to fisheries.

8 The third, our differences in
9 burden of proof. Where we've consulted
10 there's been a tendency on the fisheries side
11 to want us to prove that the action is, in
12 fact, likely to jeopardize or destroy or
13 adversely modify designated critical habitat
14 where the statute, the ESA, requires us in
15 consultation to ensure that the action is not
16 likely to jeopardize and not likely to result
17 in destruction or adverse modification.

18 So another point of tension has
19 been that type 1 versus type 2 error. ESA is
20 all about type 2, of making sure we don't
21 assume there is no effect when, in fact, there
22 is one, whereas the traditional approach is

1 not to say there is effect when there isn't
2 one. And those are diametrically opposed.
3 Those are at odds with one another. Thank
4 you.

5 MEMBER MORRIS: Thank you, Craig.
6 We're going to take just a few minutes for
7 questions and then move into the case studies.
8 So Tony?

9 MEMBER CHATWIN: Thank you very
10 much, Craig, for that. I have a question
11 regarding the critical habitat designation.
12 So the metric that is used is numbers of
13 animal per area?

14 MR. JOHNSON: It's the density.
15 It's the carrying capacity. It's the
16 potential density that an area can sustain
17 given the quality, quantity and availability
18 of the resources, physical, chemical, biotic
19 resources in the area that's been designated.

20 MEMBER CHATWIN: And so how do you
21 consider the issue of scale? Because the
22 scale of a critical habitat and the scale of

1 an action could be quite different.

2 MR. JOHNSON: Absolutely, yes.

3 MEMBER CHATWIN: So could you tell
4 us --

5 MR. JOHNSON: So for those
6 analyses, usually actions are a very site
7 specific. So we may be looking at a fishery
8 just south of, between Bogoslof and Kodiak
9 Island. We would look at that area and
10 subdivide it.

11 So most critical habitat
12 designations, the Steller's sea lion one being
13 exception, are designated by units. So we
14 have actual units, particular geographic units
15 that are designated. We usually start with
16 those units and work upward to the whole.

17 Many of the units are actually
18 quite site specific. They would be equivalent
19 to the size of this room so they correspond
20 and track very well with a very site specific
21 action. Others of them are completely
22 nebulous.

1 So we effectively start with, what
2 is the contribution of a particular site to
3 the unit, and sometimes it's just proportion
4 of the area within the unit that a particular
5 site occurs. If it's five percent we assume
6 that it represents five percent of the value
7 and then work upward from there.

8 MEMBER MORRIS: Any further
9 questions before we move into the first case
10 study? And is there a way for the people at
11 distance to raise their hand to be called on
12 or just -- everybody ready to move on then?

13 Okay, then let me introduce
14 Patrick Opay.

15 (Off microphone comments)

16 MEMBER MORRIS: It's going to be
17 Lisa Van Atta instead, and she is --

18 (Off the record comments)

19 MEMBER MORRIS: Pacific Island
20 Region Endangered Species Branch Chief. Oh,
21 you're right there on the slide, right? And
22 Paul Dalzell, are you both on live with us?

1 Can you hear us and are you ready to proceed?

2 MR. DALZELL: This is Paul Dalzell
3 at the Council. I hear you very well, I'm
4 ready to go.

5 MS. VAN ATTA: Yes, this is Lisa
6 Van Atta. I can hear you as well, thank you.

7 MEMBER MORRIS: And everybody can
8 see the slides now?

9 MS. VAN ATTA: Yes.

10 MEMBER MORRIS: Okay, then please
11 begin.

12 MS. VAN ATTA: All right. Well,
13 again good afternoon, everybody. This is Lisa
14 Van Atta. I am the assistant regional
15 administrator for the Protected Resource
16 Division in the Pacific Islands Regional
17 office.

18 So today Paul and I are going to
19 be talking about a case study on the Hawaii
20 based shallow set longline fishery
21 consultation. As you heard, Paul is also on
22 the phone, and I'll give him an opportunity to

1 introduce himself and give some words of
2 introduction. But quickly while I've got the
3 mic I'd like to provide an overview of our
4 talk.

5 So NOAA Fisheries developed this
6 presentation in collaboration with the Council
7 staff, but we did want to acknowledge that at
8 times we'll have different viewpoints and that
9 will be acknowledged on the slides.

10 I want to just thank the Council
11 for this coordination. I think it was a good
12 process and helped us learn a lot about what
13 we could do better in the future.

14 So I will start with the
15 discussion of the roles in the consultation,
16 and then hand it over to Paul who will discuss
17 some of the history of the longline fishery
18 itself and some background on the consultation
19 of the fishery.

20 Then we'll open it up for
21 discussion of the questions present in the
22 terms of the reference document, and then end

1 with some perspectives on the process of both
2 the Council and NOAA's Fisheries viewpoints.
3 We'll take some questions following the
4 presentation.

5 So with that, Paul, could you
6 please go ahead and introduce yourself and
7 anything you'd like to add before we get
8 started.

9 MR. DALZELL: Thank you, Lisa. As
10 I said before, this is Paul Dalzell. Good
11 afternoon to everybody there. It's morning
12 here in Hawaii.

13 I'm the pelagic fisheries
14 biologist, senior scientist with the Western
15 Pacific Council. I've been in that position
16 since 1996, so we've gone through several
17 management measures and biological opinions
18 over that time which are summarized in the
19 presentation.

20 MS. VAN ATTA: Great, thanks.
21 I'll get started with the role. We thought it
22 was very important to begin by clarifying the

1 roles in the consultation process.

2 As Craig touched on, this is
3 important in any consultation, but especially
4 true when it's a consultation that is intra-
5 agency. That is, NOAA Fisheries is consulting
6 on a proposed federal action undertaken by the
7 agency itself, so maintaining the integrity of
8 the process takes on heightened significance.

9 So we'll talk about here the four
10 different entities that were involved in the
11 consultation processes. Number one is the
12 Council. The Council works with our
13 Sustainable Fisheries division in developing
14 fisheries management plan amendments. That's
15 usually a common trigger for a consultation or
16 a reinitiation of consultation.

17 The second entity involved is NOAA
18 Fisheries Sustainable Fisheries Division.
19 You'll see that acronym as SFD throughout the
20 slides. This is the action agency in the
21 consultation.

22 Sustainable Fisheries Division

1 develops the consultation packet to submit to
2 Protected Resources Division using the
3 information that the Council provides. This
4 can take the form of a NEPA document such as
5 an environmental assessment, environmental
6 impact statement and the like.

7 The third entity is NOAA Fisheries
8 Protected Resources Division. We are the
9 consulting agency in these types of fisheries
10 management plan consultations. We analyze all
11 the available data and information and we
12 draft the biological opinion.

13 In this case, the case of the
14 Hawaii based shallow set longline fishery we
15 do have a formal applicant, and that is the
16 Hawaii Longline Association or the industry
17 that's represented. The applicant
18 communicates or provides information to the
19 action agency throughout the consultation
20 process and that indeed happened in this
21 consultation.

22 So with that I'll hand it over to

1 Paul to talk a little bit about the history of
2 the longline fishery.

3 MR. DALZELL: Thank you, Lisa.
4 This fishery is the largest fishery in Hawaii.
5 It was started by Okinawan migrants to Hawaii
6 in 1917. When it originally began it was
7 actually a near-shore fishery, fishing from no
8 further than maybe ten to 20 miles offshore,
9 and it used plastic buoys and bamboo poles and
10 flags to mark the lines. So it became called
11 the flagline fishery.

12 It reached its peak in about the
13 mid-1950s, after which it began its long, slow
14 decline, and it was eclipsed really by a fleet
15 here in Hawaii, but survival of the fishery in
16 the 1980s when it was discovered to the north
17 of the islands there was a swordfish resource
18 and there was very rapid expansion which would
19 be -- and I'm ready for the next slide -- its
20 actual fleet size peaked in about 1991 with
21 140-odd vessels, and effort in hooks peaked in
22 2008 with close to 42 million hooks. Can we

1 have the next slide?

2 This then just basically recaps
3 what I've just said. What you can see are the
4 prominent features of the top graph. That is,
5 the very rapid expansion of the fishery in the
6 late 1980s, early 1990s.

7 Midway through that to the flat
8 section you can see the drop in 2001, which
9 was the closure of the swordfish shallow set
10 segment of the fishery, which would close that
11 segment of the fishery between 2001 to 2004.

12 And then after 2004, the fishery
13 has been relatively stable in terms of fleet
14 size. We have again another problem of the
15 fish, if you look at the bottom graph, and
16 I'll direct you to look at the top time series
17 there with the triangles. You can see major
18 increase in the volume of hooks being
19 deployed.

20 So while we had a limited entry
21 program for this fishery, there was an
22 increase in the volume of hooks being set in

1 the fishery, but these are primarily in the
2 deep set fishery and not so much in the
3 shallow set fishery.

4 Currently the shallow set fishery
5 volume of hooks is about six percent of the
6 total number deployed annually. Go to the
7 next slide.

8 This is just to illustrate the
9 problem which we're dealing with and to point
10 out that all pelagic longline fisheries are
11 not the same. I've mentioned shallow setting
12 for swordfish and deep setting for tuna.

13 And this graphic here shows how
14 the hooks are set for the swordfish. It's
15 very few hooks between the floats. It's in
16 relatively shallow waters or relatively
17 shallow depths down to about 30 meters.

18 Some of those hooks are within
19 what we call the turtle layer, that is, down
20 to about 50 meters identifying where most of
21 the turtles spend most of their time. In the
22 deep set fishery the hooks are set primarily

1 below that turtle layer.

2 So the problem for us was that
3 most of the turtles have been caught in the
4 shallow set fishery but not in the deep set
5 fishery. Go to the next slide.

6 So this is sort of essentially the
7 consultation and history of the fishery. In
8 1991 it was recognized that the fishery was
9 taking turtles, there's a biological opinion
10 on file, but it was conducted on the entire
11 fishery and was a no jeopardy finding.

12 In 1993, again another
13 consultation on the entire fishery, and as in
14 '91, a no jeopardy finding, and the same thing
15 happened again in 1998.

16 Between 1998 and 2001, there was a
17 period where there was litigation and the
18 suits were brought against the Fishery Service
19 because of the volume of turtle catch. And a
20 new biological opinion was issued at that time
21 along also with a NEPA document, and jeopardy
22 was found for loggerheads, leatherbacks and

1 green turtles, and the RPMs for the biological
2 opinion recommended closing the swordfish
3 fishery altogether.

4 So between 2001 and 2004 there was
5 only the deep set fishery operating here in
6 Hawaii. In 2004, following work that had been
7 conducted primarily in the Atlantic, we
8 operationalized some research work using large
9 circle hooks and mackerel type bait, and we
10 were able to reopen the swordfish and
11 incentivize levels of effort.

12 There was a no jeopardy finding,
13 and there was various, put hard caps in on the
14 swordfish fishery using the idea if the caps
15 were reached, loggerheads or leatherbacks,
16 then the fishery would shut down, which indeed
17 it did in 2006 and 2010 for loggerheads and
18 leatherbacks, respectively.

19 And 2005 there was an opinion on
20 the deep set fishery and that returned no
21 jeopardy. 2008 was Amendment 18 where we
22 modified the original framework that we put in

1 place in 2004 for jeopardy, and more recently,
2 2012, again final bi-op or recent bi-op and no
3 jeopardy finding. Go to the next slide.

4 Now Amendment 18 to the fishery
5 management plan nullified the shallow set
6 longline fishery management regime that I had
7 previously alluded.

8 One of the key elements when we
9 reopened the fishery was that we put a cap on
10 efforts in terms of the number of sets. We
11 set that number as a percent of the long-term
12 average prior to the closure of the fishery.
13 That amendment removed that effort limit.

14 Also at the same time there has
15 been, Amendment 18 was done in conjunction
16 with the development of biological opinion
17 which increased, based upon the modeling work
18 that was conducted by the Science Center,
19 increased the loggerhead ITS from 17 to 46.
20 And we implemented that as the new hard cap in
21 the fishery.

22 Although the purpose of this

1 amendment was to provide increased sustainable
2 harvest opportunity for swordfish, it's a
3 result which is not under, it's fished, we
4 think could be sustainably, also attempting to
5 avoid jeopardizing the survival and recovery
6 of the ESA listed species.

7 If we go down to the next slide.

8 (Off the record comments)

9 MR. DALZELL: We've drilled down
10 already in this presentation as to what
11 happened with the 2008 and 2012 biological
12 opinions.

13 In June 2007, the Council
14 recommended the amendment development in
15 moving forward with removing the hard cap from
16 the, removing the effort limit from the
17 fishery and also including the analysis that
18 was conducted by the Science Center to modify
19 the hard caps.

20 In August 2008 Sustainable
21 Fisheries Division initiated ESA consultation
22 with Protected Resources Division. October

1 2008, the biological opinion issued a no
2 jeopardy finding. In March, the Council
3 transmitted Amendment 18, and December of '08
4 is when the final rule implementing the
5 amendment came into effect.

6 In January 2011 following
7 litigation, NOAA Fisheries reached a
8 settlement which remanded the 2008 biological
9 opinion. And so where the fishery had been
10 operating for almost a year under new hard
11 caps particularly for loggerheads at 46, and
12 these were then ratcheted back to the original
13 17.

14 This settlement agreement was
15 reached between NOAA Fisheries and the
16 plaintiffs, but the Council was not privy to
17 those discussions on the engagement in that
18 process.

19 In September 2011 the consultation
20 was reinitiated. A new bi-op was issued.
21 Again it was no jeopardy. The ITS was 34
22 loggerheads and 26 leatherbacks. Again, I

1 would just say ITS is against it, but in the
2 biological opinion.

3 June 12th, NOAA Fisheries is
4 requested to Council to take action on the new
5 take limits in the bi-op. Council found that
6 the proposed action consistent with Amendment
7 18.

8 This is important because as it
9 will show later in subsequent slides, with
10 Amendment 18 we worked closely with the region
11 in reviewing the facts of the bi-op as we
12 moved forward to developing the amendment.

13 In the 2012 biological opinion we
14 had a little bit of engagement there, but not
15 as much to say in Amendment 18.

16 But at the same time, prior to the
17 Council meeting in June, we were asked by the
18 Fisheries Service that the Council had to
19 formally deliberate on and make a
20 recommendation that the new hard caps or the
21 new ITS for leatherbacks and loggerheads would
22 be the new hard caps for the fishery, that

1 this was consistent with the intent of
2 Amendment 18.

3 So on October 12th, the final rule
4 for the take limits was issued in the Federal
5 Register. The next slide, please.

6 (Off the record comments)

7 MR. DALZELL: If we turn to the
8 tabular summary of the differences between the
9 two processes from the Council's perspective,
10 in 2008 the biological opinion was linked to
11 Amendment 18 involving higher fishing effort
12 in turtle take limits.

13 In the 2012 bi-op, 2012 biological
14 opinion, this was because the original bi-op
15 was remanded and the take limits were vacated.
16 The settlement required NOAA Fisheries to
17 issue a new bi-op within 135 days, of the
18 loggerhead and the ESA listing final rules,
19 where its standards were changed from
20 protected to endangered.

21 In the consultation process,
22 Sustainable Fisheries Division initiated the

1 ESA Section 7 in consultation with PRD, except
2 again initiated the Section 7 consultation
3 with PRD after the loggerhead publication rule
4 under the 2012 situation.

5 In the 2008 bi-op, coordinations
6 with the Council, Sustainable Fisheries and
7 PRD was very close in developing the final EIS
8 and amendment to ensure consistency between
9 the bi-op and the Council documents as they
10 moved forward. We didn't want a situation
11 where there was inconsistencies in the
12 document.

13 In the 2012 bi-op there was lack
14 of a typical interaction between Council and
15 SFD due to no new fishery amendments, but
16 whilst there was no new fishery amendments as
17 I've mentioned before, the Council was asked
18 at its June meeting to formally approve, I
19 guess, or to adopt the 2012 ITS numbers for
20 the loggerheads and leatherbacks as hard caps.

21 And we had to scramble at that
22 time because we were asked to do that just

1 before the Council meeting. And we did get
2 some updates, were given to the Council
3 through the Sustainable Fisheries Division,
4 and in the 2012 circumstances the PRD they did
5 provide briefings to the Scientific and
6 Statistical Committee and the Council
7 regarding the status of where and how far
8 along the biological opinion was.

9 And follow this other table there,
10 the final EIS amendment document, it formed
11 the ESA consultation process. In the 2012 bi-
12 op we were one step removed from the
13 development of the bi-op, and SFD consulted
14 with PRD and then communicated to Hawaiian
15 Longline Association who was the applicant.

16 But to say we were at the Council,
17 but a bit more of a distance from the
18 development of that, the 2012 bi-op as opposed
19 to the 2008 bi-op. Can I have the next slide,
20 please?

21 The 2008 bi-op, the Sustainable
22 Fisheries Division had shared a draft bi-op

1 with HLA and discussed its contents of
2 analysis, and then that was relied upon by the
3 Council, so we received a draft bi-op from
4 HLA.

5 In 2012, Sustainable Fisheries
6 Division shared the bi-op with HLA and
7 discussed its contents of analysis, and again
8 we received a draft bi-op from HLA. SSC
9 reviewed the unpublished model and analyzed
10 the impact of the proposed action early in the
11 process prior to initiation of the
12 consultations.

13 So we have a very good idea of
14 what the analytical process was going into
15 this 2008 biological opinion, and our SSC was
16 able to list information on its analysis and
17 send it to the SFD, and they were then able to
18 understand what was happening and provide a
19 comment and advice and recommendations.

20 We did have a webinar for the 2012
21 bi-op, I think it was in December 2011, on the
22 published component of the climate based

1 model. But how that model would be used in
2 the biological opinion was not provided.

3 In the final analysis, the
4 publication to the final rule on Amendment 18
5 was that rule was published. I have also
6 mentioned that about a year later, the
7 biological opinion that was written with
8 respect to Amendment 18 was vacated.

9 The Council was required under
10 2012 to adopt the new sea turtle limits after
11 the bi-op was published, so we had a situation
12 where we were kept at some distance from the
13 development of the bi-op. But at the same
14 time, we were asked to take formal action on
15 the ITS as being the new hard caps.

16 And we were asked to do this, as I
17 said, it was very late in the stage. We
18 actually had published our Federal Register
19 notice for our agenda, so we had to scramble
20 very quickly to do this as a new item on our
21 Council meeting agenda and to brief the
22 Council members on why we had to do this.

1 I think that's the last slide I'll
2 be speaking on for, is there one more? I beg
3 your pardon. There's one more.

4 So how are protected species
5 included for the development of the items of
6 action? Part of the Amendment 18 action
7 involved revising loggerhead turtle hard caps,
8 thus the consideration of protected species or
9 action was central to the fishery management
10 process.

11 And it has been with the shallow
12 set fishery is, all we've been trying to look
13 at ways we could minimize the interaction with
14 the sea turtles. The fishery management
15 action and environmental impact statement
16 considered the species conservation status,
17 threat to the species, species abundance and
18 impact to the fishery, other species as by-
19 catch.

20 I think that should, at this point
21 now, I'll hand it over to Lisa.

22 MS. VAN ATTA: That's right, thank

1 you Paul. The next slide please. So the
2 question Paul just addressed on these next few
3 were actually from the terms of reference.

4 That's why the slides are framed
5 this way. We wanted to make sure that we
6 addressed the concerns that came out of that
7 document.

8 So the next questioned presented
9 was, what information was available on the
10 species and how was it used in the
11 consultation? We actually had quite a lot of
12 information at our disposal as we went through
13 the consultation process.

14 The shallow set fishery is unique
15 in that it has 100 percent observer coverage.
16 Which means that we are dealing in absolute
17 bycatch numbers, not extrapolation. And
18 that's a really important point.

19 Compare those to the deep set
20 fishery out here in Hawaii as well, where this
21 about 20 percent observer coverage and
22 therefore requires the agency to make some

1 extrapolations as to bycatch.

2 Very different situation than the
3 shallow set. So looking at the table, the
4 information available, first was on fishing
5 effort and interaction information. Again
6 from this observer coverage.

7 Based on the this coverage we were
8 able to project number of protected species
9 expected to be taken to the fishery. And
10 these were used to calculate the number of
11 protected species captured at bycatch fishery.

12 Once expected take was calculated,
13 information on the severity of interactions
14 was used to calculate estimated mortality of
15 sea turtles caught in the fishery. New
16 science on the effects of climate change on
17 loggerheads was the basis for a climate
18 forcing model used in this biological opinion.

19 However that model was not the
20 only information considered in the jeopardy
21 analysis. NMFS does not rely solely on any
22 particular model, but considers the best

1 available information from all sources in
2 reaching its conclusions in this biological
3 opinion.

4 Of course we also looked at the
5 published sea turtle literature, recovery
6 plans and status reviews to inform the
7 understanding of population characteristics,
8 threats to species, conservation efforts,
9 environmental baselines and effects of the
10 proposed action on the protected species
11 considered in this consultation.

12 Next slide. So this is a table
13 which is actually from the biological opinion.
14 You don't need to read all the small print,
15 really the point of this is that it provides
16 an example of how the information on the
17 number of fishing sets and interactions with
18 protective species, was used to calculate
19 estimated annual protected species interaction
20 in this fishery.

21 Again, because of the 100 percent
22 observer cap coverage, these numbers were used

1 to develop the amount or extent of take
2 numbers included in the incidental take
3 statement included with the biological
4 opinion. All right, next slide.

5 So another question that we were
6 asked in the terms of reference. Would
7 additional information have improved the
8 consultation?

9 I mean I think that's always going
10 to be yes. I don't know of a situation in any
11 of our consultations where we would say, no
12 additional information would not be useful.
13 So we had to answer this question with yes.

14 As Craig and others alluded to
15 earlier in the start of this discussion, the
16 ESA uses a best available information
17 standard. So we would always prefer to have
18 more information if it were available, but we
19 have to use the information that's available
20 to the agency at the time of the consultation.

21 So yes, more information would
22 help to reduce some of the uncertainties that

1 was explicitly acknowledged in the BiOp. For
2 example, turtle population size is based on
3 nesting females, not pure abundance numbers.

4 The climate model could only be
5 forecast in 25 years because we can not
6 predict the Pacific Decadal Oscillation or PDO
7 beyond that point. Additionally,
8 international fisheries bycatch data is often
9 sparse and not always reliable.

10 So these are the types of
11 information or data gaps that would have been
12 useful and would improve consultations in the
13 future. Next slide.

14 So the question on this one is,
15 how did NOAA Fisheries interact with the
16 councils and other in developing RPMS and
17 RPAs? So obviously this was a no jeopardy
18 opinion, so reasonable prudent alternatives
19 does not enter into this discussion.

20 However, draft reasonable improved
21 measures were indeed shared and discussed with
22 the action agencies of sustainable fisheries

1 division as well as the applicant of Hawaii
2 Longline Association. We received really good
3 input from both the action agency and the
4 applicant and used that in the development of
5 final RPMs.

6 Next slide. All right, I'm going
7 to turn it back with Paul, he's going to go
8 through some perspectives from the council on
9 this process.

10 MR. DALZELL: Thank you,
11 Lisa. Again just to reiterate, the council is
12 statutory responsible for federal fishery
13 management policy in the Western Pacific.

14 So under Magnuson, we develop
15 fishery management plans where we have fishery
16 system plans now. And those plans are then
17 reviewed by NOAA Fisheries and Department of
18 Commerce and then codified in the Code of
19 Federal Regulations.

20 The 2008 BiOp was developed
21 concurrently with the fishery management plan
22 amendment with the pelagic's plan. And the
Council, and as I mentioned previously, the

1 region and the time center worked very closely
2 as those two processed the amendment and the
3 BiOp together.

4 We had no role in the federal
5 agreement to re-amend the 2008 file and no
6 council enrollment in the drawing of the 2012
7 file. But why is this important?

8 Well, when the statutes are early
9 and responsible agency for developing fishery
10 management policy. We had a situation where
11 the hard cap on loggerheads was changed from
12 17 to 46. And then through the making of the
13 BiOp was reduced back to 17.

14 So as a management agency we
15 really need to marginalize that early, the
16 situation was something that was beyond our
17 control and also we were not getting privy to
18 this discussion and the results of the
19 dictation of the 2005. Agency provided input
20 recommendations on the model that was used in
21 the 2008 opinion, well the head of the
22 consultation. But we were limited to review

1 of the published version of the new model
2 view, the 2012 BiOps.

3 So we knew this would be the type
4 of model was going to be used, how it was to
5 be used was not something that the accuracy of
6 the council was privy to. The council
7 followed the amendment as it was actually
8 implementing a new Management Act, because of
9 the amendment that was enacted.

10 So we were told, as we were not
11 happy for not bringing the old amendment to
12 the SFP, the way that we previously done the
13 previous engages of biological opinions was
14 different. But as I mentioned before with the
15 Council, was then formally asked to prove the
16 date limit of the 2012 BiOp, then show
17 consistency with Amendment 18.

18 And the Government then wanted it
19 done at the 11th hour. And it would have been
20 much easier if he had been engaged in the
21 process of the BiOp so that we could be better
22 prepared to brief councilmen.

1 And again, the reason for the
2 marginalization of the Council in the 2012
3 BiOp remains uncertain. We have our
4 prospective and NOAA Fisheries has theirs.

5 But bottom line is, it needed to
6 be a consistent transparent consultation
7 process involving the Council, regardless of
8 what drives the counted days. At the end of
9 the day they are still the statutorily
10 responsible Federal Fishery Management Agency
11 or organizations that develops the management
12 policy.

13 Next slide please. Lessons
14 learned in terms of scientific information and
15 analytical methods. To obtain major
16 improvements in data availability of
17 population models all the time, are used in
18 biological opinions at fisheries to supply
19 landmass and environmental impacts.

20 We're still lacking a robust stock
21 effects with the sea turtles. One of the
22 prime data feeds that goes into a biological

1 opinion on our nesting beach counts.

2 That's only really a segment of
3 the turtle population. In fisheries we try to
4 make account of fishes out there and then look
5 at the impact of the fishery relative to how
6 it's been taken away.

7 We don't have the same kind of
8 population models for sea turtles. And so we
9 base the status of the population on the
10 volume of nesting that's taking place from
11 year to year.

12 And that's pretty expensive. It
13 matches the third bullet, that demographic
14 that the sea turtles develop robust models for
15 assessing impact.

16 And the bottom line again, is the
17 threshold for jeopardy to make it clear in
18 terms of what is the true impact to the
19 population of the given action. So what is
20 the impact of, for example, why longline
21 fishery on North Pacific loggerheads and West
22 and Southwest Pacific leatherback turtles,

1 which are the two primary species, which
2 interact without fisheries?

3 The impacts of all those things
4 evaluated are based upon nesting these trends
5 and not on the population as a whole. Can I
6 have the next slide please?

7 So in the biological opinions,
8 this slide essentially summaries the
9 analytical processes used to arrive at
10 jeopardy or no jeopardy opinion. In 1991 and
11 1993 the entire fisheries were the subject of
12 those two BiOps and again, there was no
13 analytical process that was included to
14 evaluate impact issue.

15 But in 1998 we set in Honolulu a
16 third set. Again, a simulation model rather
17 than a population model was used in the
18 opinion, and again, there was no jeopardy
19 finding.

20 In 2001 they had talked again to
21 fly off with only a cod fishery. And two
22 types of models, a Dennis model and matrix

1 model were used to evaluate the impact of the
2 fishery onset where that returned a jeopardy
3 finding.

4 The 2004 biological opinion which
5 issued the reopening of the swordfish fishery.
6 And it's not clear what analytical processes
7 were used in that amendment. I do recall that
8 we developed a series of alternatives and I
9 think we had some video conferences on those
10 between NOAA Fisheries and the Council staff.

11 But we didn't attend the 2005
12 deep-set fishery because it was a very clear
13 analytical process that was developed by the
14 Pacific Islands Fisheries Science Center here
15 in Honolulu. They called it quasi extinction
16 model and that was applied to the deep-set
17 fishery which turned a no jeopardy and the
18 BiOp was a no jeopardy finding.

19 The same analytical approach was
20 used in 2008 for the shallow-set fishery. And
21 this was the one where the SFD was also able
22 to convey and provide recommendations on the

1 model.

2 And in 2012 the climate forcing
3 PVA model, population liability analysis and
4 then that biological opinion there's an
5 erratic, what was called a classical PVA and
6 then they ran on the used climate forcing. In
7 fact using the Pacific Decadal Oscillation and
8 the forcing agent. And that again turned,
9 resulted in a no jeopardy finding.

10 Can I get the next slide please.
11 Really to summarize everything up that we've
12 been talking about, with respect to the
13 biological opinions and jeopardy findings, you
14 can see that in the 1991, '93 and '98,
15 essentially the ITS of all turtles in the
16 Hawaii Longline Fishery was actually based
17 primarily on the volume of turtles that was
18 interacting.

19 But still, there was no jeopardy
20 determination was given for those three BiOps.
21 Then following the litigation, we still are
22 much more conservative in respect to our

1 approach by the fishery service.

2 And so the ITS fall in the 2001
3 BiOp was again, all turtles combined, was
4 about a tenth of what it had been in 1998.
5 And there was a jeopardy finding which
6 resulted in the closure of the shallow-set
7 swordfish fishery.

8 2004 and subsequent biological
9 opinions all returned no jeopardy findings.
10 But again the ITS began to close the deep and
11 the swallow-set fishery, were a very
12 conservative. But the longline fishery, the
13 shallow-set fishery in Hawaii, which has
14 always been the primary focus, was fortunate
15 in that it was operationalized.

16 The research that was conducted in
17 the Atlantic with the large circle hooks and
18 mackerel size bait was in such a way that it
19 was able to minimize interactions and was able
20 to function even though the ITS or the number
21 of turtles they could interact with was much
22 more limited. And I shall now turn back to

1 Lisa for the next five.

2 MS. VAN ATTA: Thanks. Yes, we're
3 running a little long so we're just going to
4 wrap up with two more slides, which is NOAA
5 Fisheries perspective on the consultation
6 process.

7 So as I said from the beginning
8 it's important that each party understood its
9 role in this consultation. This is somewhat
10 unique and that the industries did have a
11 significant role through its Applicant status
12 in the Hawaii Longline Fisheries.

13 We also think that additional
14 communication between the Action Agency
15 Sustainable Fisheries Divisions and the
16 Council could have improved the process of
17 2012. More dialogue amongst those two parties
18 probably would have been helpful and it's a
19 lesson learned for us in the future.

20 We did want to acknowledge the
21 communication with the Applicant, again the
22 Hawaii Longline Association, an incorporation

1 of the Applicant's substantive comments were
2 very useful to process. We think in fact it
3 provided a more robust document at the end.

4 Development of the BiOps is
5 facilitated by outreach to the Applicant. And
6 incorporation of their comments and engaging
7 them at all meaningful junctures, we thought
8 was very useful and productive.

9 Finally, this isn't a lesson
10 learned particularly for this biological
11 opinion, but just in general. We think that
12 NOAA Fisheries mostly insured that the
13 complication process and the result of
14 biological opinion is a objective,
15 scientifically sound and legally defensible.

16 We think this maintains its
17 integrity of the process is beneficial to all
18 parties involved. Especially this highly
19 litigious arena of fishery management actions
20 out here in the Pacific.

21 Next slide please. And then
22 finally just on the process. While NOAA

1 Fisheries always uses the best available
2 information, we need to continue to address
3 the information gaps in order to strengthen
4 future analysis.

5 Paul and I have already touched on
6 those, I won't elaborate. And then we just
7 wanted to make the point again, that we should
8 rely or we do rely on a variety of sources of
9 information and analysis in conducting a
10 consultation.

11 Models, while useful, are only one
12 of these sources. So just the point is that,
13 yes we spend a lot of time addressing
14 different models that were used, they were
15 used in collaboration with the best available
16 data at our disposal to come up with a very
17 integrated jeopardy analysis and conclusion.

18 And with that, I think that ends
19 our presentation. And the next slide is just
20 about questions.

21 MR. LYNCH: All right Lisa, this
22 is Jim Lynch. I'm a representative here for

1 the West Pac Council Alternative and I just
2 wanted to make a couple comments to close and
3 some of the lessons learned here working with
4 the Council and these issues.

5 So I think what you're sensing
6 from the Western Pacific Council working on
7 these consultation issues is they consider
8 themselves to be an action agency as that
9 terms defined in the act and in the
10 alternative and applicant. And I think it's
11 a policy decision on the part of NMFS, which
12 it chooses to select for purposes of
13 interacting with councils on Section 7,
14 biological opinions.

15 There are lots of very good and
16 strong policy reasons why council should be
17 involved early on in the development of a
18 biological opinion. And there should be an
19 opportunity for council staff and NMFS staff
20 and other applicants to work back and forth to
21 develop these documents.

22 At the end of the day I think what

1 everybody wants here is the strongest possible
2 document reflecting all the available
3 scientific information. That's the bottom
4 line.

5 And again, I think the act is
6 flexible enough and the policy certainly are
7 flexible enough to allow the Councils to be
8 treated in that manner. When that has
9 happened, I think the lesson we have learn is
10 that the process works much better, the
11 document is much stronger and all the parties
12 involved have a much clearer understanding of
13 each others' views.

14 As it currently stands, the West
15 Pac Council has to submit comments on
16 documents through an applicant, through a
17 different applicant that the agency has
18 recognized. Which is just an odd situation in
19 general.

20 So I think as this work group
21 talks further about these matters, in terms of
22 being more efficient, being more transparent

1 in how to develop these documents, we would
2 urge this group to consider policy changes or
3 recommendations for policy changes, that can
4 be adopted and to allow councils to play a
5 more integrative role in the consultation
6 process.

7 MEMBER MORRIS: Okay, thank you.
8 Thank you for that comment and thank you for
9 the presentation. We're going to have just
10 about ten minutes of discussion before we move
11 into the next case study here.

12 And let me remind those
13 participating in this discussion that we're
14 looking for best practices, we're looking for
15 ways that types of information and methods
16 used in biological opinions can be improved
17 and processes that can be coordinated and
18 carried out in a more coordinated fashion.
19 Keith?

20 CHAIR RIZZARDI: Hi, this is Keith
21 Rizzardi, thanks to everybody for that great
22 presentation. Paul, missed you in Hawaii,

1 wish I could be out there with you.

2 I thought the presentation was
3 interesting in that both you, Paul and you,
4 Lisa, were recognizing that there was an
5 opportunity for better process. And as a law
6 professor I talk all the time about the two
7 basic aspects of legal problems.

8 And you have a procedural issues
9 and have substantive issues. And what I'm
10 hearing is the parties are all agreeing that
11 procedurally there was an issue. There could
12 have been better coordination.

13 And it's interesting that NOAA was
14 able to coordinate with the HLA, but less so
15 with the Councils. I'll also point out that
16 on the substantive side that has consequences
17 too.

18 Because if there is more
19 communication, then there's more sharing of
20 information, there's better data that comes
21 together. The best available information
22 comes closer to reaching consensus on it and

1 you often times have less controversy over the
2 outcomes that come out.

3 So just an observation on both the
4 process side and the substance side.

5 MEMBER MORRIS: Tony?

6 MEMBER CHATWIN: Thank you, this
7 is Tony Chatwin. Thanks for the presentation.
8 My question goes to methods, I suppose.

9 I notice the slide where you
10 describe what models were used and the finding
11 of jeopardy or no jeopardy. And it just made
12 me wonder, how is the decision made to employ
13 a given model at a given time and who makes
14 that decision?

15 MEMBER MORRIS: Is there anyone
16 here who can answer that question or not here,
17 online?

18 MS. VAN ATTA: Yes, I can answer
19 that, this is Lisa Van Atta. So it is the
20 agency's decision to assess. When we know
21 there's a fisheries management action coming
22 our way, we talk to our fisheries science

1 center.

2 And we talk to them about what
3 information they have since the last
4 consultation, any new information on the
5 species or other factors, such in this case,
6 as climate. And we ask them to help develop
7 a model for us that we can use in the
8 consultation. So it is definitely a NOAA
9 Fisheries decision on which models to rely
10 upon.

11 As I've acknowledged at the CCC
12 meeting in May, our opinions and the models
13 relied upon have improved throughout the
14 years. As new data becomes available, we
15 incorporate that into the models and our
16 process and information evolves throughout
17 time.

18 I think Sam Rauch at CCC made the
19 point, that litigation has driven us to take
20 a harder look at the information we've
21 reviewed throughout the years and make our
22 model and our biological opinions stronger and

1 more robust through time. So I think that's
2 the point that was being depicted on Paul's
3 slide. Is that yes, different models were
4 used, but there were good reasons for that
5 evolution thinking by NOAA Fisheries.

6 MEMBER MORRIS: Marian?

7 MS. MACPHERSON: Thanks. I have a
8 couple of questions, just real quick. I'm
9 wondering what HLA applied for?

10 But the bigger question is, you
11 mentioned that one improvement could have been
12 that SFD could have communicated more and,
13 what should they have been communicating about
14 and why didn't they?

15 MEMBER MORRIS: Okay that's two
16 different questions. So what about the HLA,
17 who were the applicants, what were they
18 applying for? And it seems like that was what
19 was really different in the 2012 case.

20 MS. VAN ATTA: No, the HLA was
21 applicant in both biological opinions. I'm
22 not probably the best one to explain this, but

1 HLA did sue the agency to maintain their
2 applicant status and they are applicants under
3 the Endangered Species Act.

4 They have applicant status. So
5 the Applicant is the Hawaii Longline
6 Association. Applicants are entitled to
7 certain junctures throughout the process.

8 Applicants can be brought in. One
9 of them is when there is a development of a
10 reasonable and prudent alternative in a
11 jeopardy analysis. We must, by statute and
12 regulation, share a draft of the RPA with the
13 applicant. That's one thing.

14 The second things is they get a
15 draft of the biological opinion before it is
16 finalized. So we did communicate with the
17 Applicant, HLA, throughout the consultation.

18 And I'll stop with that point, if
19 Paul or anybody else wants to add to HLA's
20 Applicant status. Maybe Jim Lynch?

21 MR. DALZELL: We just lost him,
22 Jim is not in the room right now.

1 MS. MACPHERSON: Okay.

2 MR. DALZELL: I think the second
3 part to that question, about communication
4 between SFD and the Council. Was that what I
5 was understanding?

6 MEMBER MORRIS: Yes, that's right.

7 MS. VAN ATTA: And we can go ahead
8 and answer that because that was on our slide.
9 The point was just that, from my understanding
10 with our discussion with our Sustainable
11 Fishery Division, there wasn't a lot of
12 communication with the Council in either
13 direction.

14 It wasn't that the Council was
15 calling SFD for an update and it wasn't that
16 SFP was necessarily reaching out to the
17 Council. A lot of the communication went
18 through the Hawaii Longline Association. And
19 we were just making a point.

20 If there were junctures where the
21 Council felt like they weren't being involved
22 adequately that, that is our conduit. The

1 Sustainable Fisheries Division, as the
2 Applicant, is always available to them for
3 questions and provide as much information as
4 appropriate as the biological opinion is
5 developed.

6 MEMBER MORRIS: Okay, any other
7 questions? Again we're looking for best
8 practices and areas for improvement. Tony?

9 MEMBER CHATWIN: Thanks, Tony
10 Chatwin again. Just a question. I don't know
11 what bin it falls into, but you mentioned in
12 your presentation the type of information that
13 you used and that nesting females is the, I
14 guess the metric that you use, because that's
15 the one that's more readily trackable.

16 And I'm assuming that if you had
17 more in water information of habitat use by
18 turtles, that would make your job easier? And
19 so I'm wondering, while the process that was
20 described is unfolding, is there a research
21 effort ongoing to improve the information of
22 in water habitat use that could help with

1 future determinations?

2 MS. VAN ATTA: Yes, so it's one of
3 our Pacific Island Fisheries Science Centers
4 priorities to do more in water work. To get
5 at just the question you raised, so yes.

6 MEMBER MORRIS: Okay, are you
7 ready to switch to another case study, is
8 there something else to ask about the Hawaii
9 example?

10 MS. VAN ATTA: No.

11 MR. DALZELL: Just wanted to make
12 one last comment, which was that in the 2008
13 BiOp, the chief drafter of the amendment on
14 our staff communicated directly with the
15 Protected Resources Division staff and not
16 primary through the Sustainable Fisheries
17 Division staff. So there was that
18 communication going on which was absent
19 largely from the 2012 file BiOp.

20 I would just note that, again I
21 was asked a question the other day. If we had
22 been more personally involved would the

1 numbers of parties differ there?

2 I answered no, the party wouldn't.
3 But the fact that we would had held it at some
4 distance from the biological opinion had
5 consequences, because later in the year the
6 advice of, I think our general council, the
7 brief of administrator asked for this Council
8 to take forward action to approve the ITS for
9 the loggerheads and leatherbacks as the new
10 hard caps.

11 And to agree that it was
12 consistent with the content of Amendment 18.

13 Yes, so --

14 (Off the record comments)

15 MR. DALZELL: Yes, I mean what
16 would have happened if the Council hadn't done
17 that? Would that have meant that there would
18 have been legal challenges because we hadn't
19 followed the correct process?

20 My point though is that again,
21 that we were more marginalized in 2012 and yet
22 we were still expected to have to take some

1 kind of formal action.

2 MR. LYNCH: Well and I think Paul,
3 a different way to say that, this is Jim Lynch
4 again, is that the council needs a record for
5 its action under the Magnuson Act just as NMFS
6 needs a record for its Section 7 consultation.
7 That record is very similar and somewhat
8 identical when it comes to these things.

9 And that I think is another strong
10 policy reason why Councils should be
11 integrated in the development of the BiOp.
12 NMFS is using data generated by the Council.
13 There's a risk of misinterpretation of the
14 data.

15 We both need strong records that
16 we defend and take action upon. Which is why
17 it makes sense for the Council to just be
18 considered an action agency for the purposes
19 of this action.

20 And again, I think that's a policy
21 question that this group can make
22 recommendations on. I think that the policies

1 are out there, they're in the Section 7
2 handbook, they're in the rights.

3 There's a standard practice that
4 NMFS has developed and I would venture a guess
5 that the different regions of NMFS treat this
6 issue differently with different Councils. I
7 don't think there is consistent treatment of
8 this and I think this is an opportunity to
9 make the right decision and create a better
10 process than what we've had.

11 MS. SIMONDS: And let me just add
12 that we were the action agency from the
13 beginning, from '77 until Bill Fox became the
14 head of NMFS. He changed the process.

15 The Councils would write the
16 letters to the agency where, whether it was
17 NMFS or the Fish and Wildlife Service, and
18 said that we are considering an amendment to
19 such and such and this is our request for
20 consultation. It was as simple as that.

21 But when Bill came along he
22 decided differently, so he made this policy

1 change and you know frankly it's not working
2 for us. And so I'm so happy that we're having
3 this committee, this discussion and I hope
4 that things work out well.

5 MEMBER MORRIS: Okay, well so
6 we've noted those suggestions. Is it okay
7 then to go on with the next case study
8 presentation?

9 MS. VAN ATTA: Do you mind, this
10 is Lisa Van Atta. Do you mind if I just jump
11 in and just offer one closing comment?

12 MEMBER MORRIS: Sure.

13 MS. VAN ATTA: I'll make it fast.

14 MEMBER MORRIS: Sure.

15 MS. VAN ATTA: Okay, thanks Kitty,
16 Paul, Jim for those thoughts. I just would
17 like, beside that we believe the difference
18 between the engagement with the council
19 between 2008 and 2012 is that in 2008 we
20 actually had a fisheries management action
21 before the agency. There was an Amendment 18.

22 And so there was necessarily close

1 of communication via a sustainable fisheries
2 and protected resources on those amendment
3 documents, those NEPA documents. That was the
4 appropriate juncture and we would foresee
5 that, that would happen in the future with the
6 new amendment.

7 As described in the presentation
8 in 2012, we didn't have a similar fisheries
9 action that was ongoing to take place. It was
10 in the reaction to the settlement terms that
11 we needed to reinitiate consultation and
12 consider all new information.

13 So that's why we believe, and it's
14 just a personal prospective, why we believe
15 there was a little bit difference of the way
16 the Council was brought in, in both those
17 consultations.

18 And then secondly I just wanted to
19 say that the issue Paul brought up and that
20 Jim was discussing, was that the Amendment 18
21 specified a number of hard caps that were no
22 longer supported after the biological opinion

1 was remanded. So we needed to make a change
2 and we needed to implement an idea that's
3 consistent with Amendment 18.

4 So we used Magnuson Act 305(d)
5 process to come up with, to reconcile those
6 two processes. This is really outside the
7 purview of protected resources division and
8 really is more of a Magnuson Act issue.

9 So I just want to make sure that
10 we understand, here on this call, we're
11 talking about the consultation process and
12 what occurred after the biological opinion was
13 signed, was under the authority of the
14 Magnuson-Stevens Act. So thanks for letting
15 me provide that clarification.

16 MR. LYNCH: Thanks Lisa, and I
17 think just to kind of summarize from the
18 Councils view. I think somewhat on this is
19 that we do believe we are the action agency,
20 that we are making recommendations for action
21 here and that regardless of the form that you
22 view that action taking, the process will be

1 better if we have an action agency,
2 consultation agency relationship. Because we
3 won't miss information.

4 That's our view and we're hopeful
5 that this process that we're going through now
6 will help us all talk through these issues and
7 identify ways to improve and make us more
8 efficient. Because at the end of the day I
9 think we all have a shared interest in making
10 these more defensible and credible documents.

11 MEMBER MORRIS: Okay, so thank you
12 all for your comments and listening to the
13 discussion. We definitely get the points that
14 you're all making and they will be part of the
15 raw materials that we'll work on in the
16 working group.

17 And now were are going to move on
18 to the second case study, which has to do the
19 Gulf of Mexico, reef fish fishery. And David
20 Bernhart is in the room with us here and Kevin
21 Anson is on the webinar. So who's going
22 first?

1 MR. BERNHART: I think I'll start
2 Julie, if that's all right, Kevin?

3 MR. ANSON: Please, go ahead.

4 MR. BERNHART: Thanks Kevin. All
5 right, I have technical control here and a
6 microphone, off to a good start. So Kevin and
7 I have split up our presentation a little bit.
8 I'll do most of the background and the NMFS
9 lessons learned and then hand over to Kevin
10 for the Council prospective.

11 I think our view, perhaps, of some
12 of the limitations will be very similar. But
13 let me try to lay this out. And also I should
14 say thank you to our Pacific Islands
15 colleagues because they done a lot of the
16 background and introductory stuff that I
17 neglected to do, but now can take advantage of
18 the good groundwork that they've laid.

19 So with that, let me dive in.
20 There we go. My title on the assistant
21 regional administrator for protected resources
22 in the NOAA Fishery Southeast Regional Office,

1 and I was at the time of this consultation
2 we'll be talking about.

3 But I guess I want to point out,
4 first of all that this particular case study
5 was not necessarily a typical consultation
6 where protected resources, considerations
7 usually are secondary or a discovery later on
8 in the process. The amendment that was
9 central to this had as, I think its only
10 purpose, addressing sea turtle bycatch in the
11 Gulf reed fish fishery. So it was really the
12 central issue.

13 And then all of all those roles
14 and responsibilities for consultation, that
15 got laid out in the previous presentation,
16 were definitely all applicable. However we
17 had a few additional roles as well.

18 SER-PR, throwing in acronyms
19 already, Southeast Region Protected Resources.
20 We provided a high level of staff support to
21 the Council, primarily giving species
22 expertise and also some consultation process

1 advice, that fed directly into the amendment
2 development to help inform the Council and
3 help inform the amendment and its EIS.

4 Also we're aware very much of the
5 same kind of role, integrity issues that I
6 think you heard Lisa Van Atta talking about.
7 And so we did try to segregate when we were
8 working on our consultation and when we were
9 working as technical experts giving advice to
10 the Council and try to meet both of those
11 roles without crossing any lines on anything.

12 So this is the reef fish fishery
13 of the Gulf of Mexico we're primarily going to
14 be talking about, the directed grouper fishery
15 in the western Florida shelf. There is some
16 reef fish fishing in the Western Gulf of
17 Mexico, but it's relatively minor.

18 It's a mixed commercial and
19 recreational fishery, gag and red grouper are
20 the primary target species. The commercial
21 fisheries uses both bottom longline and
22 vertical line. A lot more small operators in

1 the vertical line fishery, fewer larger
2 operators in the bottom longline fishery.

3 And then we primarily were dealing
4 with this amendment with issues in the bottom
5 longline fishery, as I'll talk about, that's
6 where the greatest proportion of the bycatch
7 was. But the scope of our consultations is
8 pretty much always the entire fishery,
9 authorized under an FMP and whatever
10 regulations and whatever proposed fishery
11 management action there may be.

12 So I'll throw a comment out there
13 early. I think this was an example where it
14 was particularly valuable to be doing this
15 work up front in the council process, in the
16 fishery management amendment process, rather
17 than late in the day. Perhaps as a result of
18 reasonable and prudent measures, a reasonable
19 and prudent alternative that would come out of
20 a consultation.

21 And I say that because the council
22 is much, much better qualified than I. I

1 would say that I am not qualified at all to
2 make any of the social kind of decisions on
3 the roles of the different sectors.

4 As we talked about, most of our
5 focus was on the bottom longline. But the
6 bottom longline, the vertical line and the
7 recreational sectors all take sea turtles and
8 are part of the consultation and are part of
9 the issue.

10 The other part of the issue is
11 that we had very poor data on the level of
12 interactions between the reef fish fishery and
13 sea turtles. And after some preliminary
14 observer work of Southeast Fishery Science
15 Center report showed that we had much higher
16 levels of sea turtle bycatch in the bottom
17 longline sector.

18 About 800 turtles over an 18 month
19 period. The existing biological opinion at
20 the time authorized an incidental take of 85
21 loggerhead turtles over a three year period.
22 So we had an actual observed or extrapolated

1 from observer data bycatch rate that was many
2 times what the existing biological opinion had
3 been based on.

4 And then I'll also, I'm going to
5 through a chronology of events, but something
6 that I want to emphasize from the outset is
7 that things went, from my prospective and I
8 think from the council's prospective, very
9 rapidly to resolution in this particular case.
10 So it was September that the science center
11 produced this report, which was significant
12 new information, September of 2008.

13 And it was in October of 2009 that
14 we issued our final biological opinion and had
15 most of the management measures for the
16 fishery worked out and going into place. So
17 13 months for the full FMP amendment,
18 development and the consultation and working
19 with brand new data.

20 And for the Council, a brand new
21 issue. Before this report I'm sure they had
22 not had anywhere on their radar screen that

1 loggerheads and reef fish was going to be the
2 hot issue.

3 Here's a little graphic, not
4 showing up very well, but that map of the West
5 Florida shellfish showing the distribution of
6 observed bottom longline set, so you can see
7 that it's out there in, fairly far from shore
8 but still not that deep water 20 to 50
9 fathoms. And you can see that the observed
10 sea turtle takes are from throughout that
11 area.

12 This area is known to be a pretty
13 important foraging area for loggerhead
14 turtles. Many, particularly adult or at least
15 the post-nesting females, that have been
16 tracked from West Florida nesting beaches will
17 go out to the type of area and have their
18 foraging grounds out.

19 And the sea turtles observed
20 bycaught in the bottom longline fishery were
21 relatively large animals or adult animals. So
22 there was concern about their relatively high

1 reproductive value to the species.

2 So events started moving pretty
3 rapidly. We had pretty much immediately a
4 request for reinitiation of consultation. The
5 previous biological opinion because of the ITS
6 being exceeded.

7 And entered disciplinary planning
8 team and IPT, is part of at least our regional
9 operating agreements on how amendments will be
10 developed. So NMFS and Councils staff and the
11 NMFS staff in these typically will be
12 sustainable fisheries, protected resources,
13 economist social scientists and Southeast
14 Fishery Science Center as well.

15 So the Council went quickly into
16 scoping, dealing with the sea turtle bycatch
17 problem. At the October Council meeting my
18 division notified the Council of the new
19 findings of the ITS exceedance. Discussed
20 ways of potentially reducing bycatch and then
21 also went over the sea turtle bycatch
22 estimates with the council.

1 And the council immediately
2 decided to begin scoping. Specifically to
3 minimize sea turtle bycatch in the Gulf reef
4 fish bottom longline fishery.

5 There was also, at that particular
6 Council meeting in October, a number of the
7 environmental NGOs that were participating and
8 quickly got with Council members and industry
9 members to talk about possible ways forward.
10 I think that there was a very deliberate
11 decision on the part of many of those folks in
12 the NGO community, to give the industry and
13 the Council the space to try to work this
14 problem out through the council process and
15 through the amendment.

16 And the fact that the Council
17 moved immediately at that first meeting to
18 begin scoping gave the environmental community
19 some comfort in that. That said, I think the
20 Council and the fishery service knew that
21 there was certainly a high potential for
22 litigation because of the high levels of take

1 of loggerhead turtles previously undiscovered.

2 And then I'll say one more thing,
3 there was at that time loggerhead nesting in
4 Florida and thus the Atlantic had been
5 declining steadily for about a decade. It had
6 dropped about 40 percent.

7 There were many papers in the
8 referee journals really ringing major alarm
9 bells about the status of loggerheads. And
10 here we had a newly discovered impact from a
11 fishery that was impacting a large number of
12 adult loggerheads. So there were a lot of
13 exclamation points floating above peoples'
14 heads around the room.

15 In January of 2009, NMFS developed
16 a document that we call a Section 7(a)(2),
17 Section 7(d) analysis. And it's basically
18 something that gives us some record basis for
19 continuing with a previously authorized
20 action, even when there are questions raised
21 about the validity of the biological opinion.

22 And certainly that was the

1 situation we were in. We had our 2005
2 biological opinion with the incidentally take
3 authorized of 85 and we knew we were way above
4 that.

5 So we did that and then at the
6 January meeting the Council further requested
7 that we publish emergency regulations under
8 Magnuson authority to address sea turtle
9 bycatch while they continued with the
10 permanent amendment development. And that
11 actually, that would go on our May issue.

12 So in April through June we were
13 working frantically with the science center to
14 bring in additional information. So we got
15 more information on commercial bottom longline
16 and vertical line take estimates.

17 We looked into also the
18 recreational fisheries for the biological
19 opinion. And this last bullet here is, I'll
20 talk about a bit more in a minute, but we
21 pushed our science center very hard to develop
22 a new loggerhead specific sea turtle

1 population assessment.

2 Sort of in response to the
3 question of, when do you use what model?
4 Here's a case study of that.

5 We all of a sudden had a big
6 problem we needed to address. The Council was
7 interested in doing in it, we wanted to give
8 them quantitative tools, if possible, and none
9 existed.

10 So the Southeast Science Center
11 worked very rapidly to try to develop that
12 sort of quantitative tool for Councils use and
13 for our use. And at the June Council meeting
14 they made a presentation on their findings and
15 I'll say a little more on that later.

16 MEMBER MORRIS: So David, that's
17 15 minutes.

18 MR. BERNHART: Okay.

19 MEMBER MORRIS: You intended to
20 use half the time.

21 MR. BERNHART: Thank you. In May
22 there was, we did in fact do an emergency

1 rule, closing a large area of the Gulf to re-
2 fish, but it was temporarily limited to that
3 180 days.

4 Again the June 2009 Council
5 meeting, we presented that sea turtle
6 population estimate, and that was from the
7 science center, and we from protected
8 resources provided a consultation assessment
9 to the Council. That's something that's in
10 our draft operational guidelines.

11 And was, I'm not sure if it was
12 quite exactly the sense that's in the
13 guidelines, but what we wanted to do was to be
14 very clear and explicit with the Council.
15 Which was looking at the, the Council was
16 looking at the same information.

17 Their problem was sea turtle
18 bycatch, or our problem was sea turtle
19 bycatch. We wanted to give the Council as
20 clear an indication as we could of how we
21 would be approaching that information, because
22 in any of these analyses, certainly there are

1 arguments for alternative approaches to things
2 and we wanted to show them where we thought we
3 would be going.

4 And I'm going to quickly skip over
5 that next one and explain that a bit later.
6 The Council did refer between that June
7 meeting and this August meeting. They
8 referred the matter to the SSC, which also
9 gave them some recommendations.

10 Finally at the August 2009 meeting
11 the Council took final action and voted to
12 submit it. And the Council had a suite of
13 measures all directed at reducing sea turtle
14 bycatch. A seasonal area closure, a longline
15 endorsement for vessels with demonstrated
16 landings history above 40,000 pounds annually.

17 You know that eliminated a lot of
18 the latent effort in more small participants
19 participating in the longline fishery. From
20 my memory I think that reduced about 50
21 percent of the participants at that level.

22 They considered many alternative

1 formulations of all of these. And then also
2 limiting the number of hooks that could be
3 possessed on board and could be fished on
4 bottom longline vessels. In total those
5 measures were anticipated to reduce the sea
6 turtle bycatch and mortality by about 60
7 percent in the bottom longline sector by
8 itself and by about 50 percent in the combined
9 fishery overall.

10 So then in September we got a
11 final analysis of exactly those numbers from
12 the sustainable fisheries division to the
13 protected resources division and we had a
14 complete consultation package. Now I'll note,
15 just where we are in the timeline on this,
16 we've already had the DEIS, we've already had
17 comments on the DEIS, we've had a SSC review
18 and the Council has taken final action and
19 voted to submit the amendment.

20 We developed the biological
21 opinion and finalized it in mid October.
22 Considering the fishery operating under

1 Amendment 31. And we also had the additional
2 rulemaking, that was the bullet that I skipped
3 over.

4 We were looking at a situation
5 where the emergency Magnuson rule was
6 expiring. We had final action and the
7 Amendment 31 was working its way through the
8 system, but not going to have completed
9 rulemaking and gone into effect until some
10 time the following year.

11 And people were concerned about
12 what would happen in the interim period. And
13 so NMFS used it's authority under the
14 Endangered Species Act to go in with an
15 emergency rule to cover that interim period.
16 And we implemented the parts of the area
17 closure from Amendment 31 and the hook
18 closures from Amendment 31.

19 We didn't think it was prudent or
20 maybe not even within our authority to dive
21 into deciding who gets to participate, which
22 was what that endorsement did.

1 But that provided some interim
2 protection until the full suite of measures
3 was in place. And there is that.

4 The biological opinion concluded
5 no jeopardy. And finally we got Amendment 31
6 published in January and effective, I think,
7 in roughly May of 2010.

8 We did, throughout this period of
9 time, share as much sea turtle information as
10 we could with the Council. The fourth one,
11 this population assessment, I might want to
12 talk about just a little bit more. That was
13 the hurry up develop a new model that we
14 pushed the Southeast Center to develop.

15 And I would say that that was a
16 mixed bag. Let's see what my next slide is.
17 That was a mixed bag. We pushed them to do it
18 very rapidly and what they discovered was that
19 there was so much uncertainty in all of the
20 life history data feeding into it that the
21 uncertainty in their final answers was really
22 quite huge.

1 We had some discussions about,
2 might you narrow that down and probably you
3 could. But I think overall the Council was
4 presented with this potential quantitative
5 tool that was not as useful as anyone would
6 like it to be. And I think that gave a lot of
7 people a lot of cause for concern.

8 This is one of the particular
9 questions on the terms of reference about
10 involving the Council in RPMs and ITS. There
11 was no involvement in that. We were involved
12 fairly extensively in the development of the
13 fishery management action, but then when it
14 came time to drafting the BiOp and finalizing
15 it, that was all of the Council interaction
16 was behind us.

17 So are lessons learned on this, I
18 guess number one is the Councils can proceed -
19 - and something that I'd like to emphasize,
20 the Councils do have the authority to
21 specifically address protected species
22 interactions. We don't have to treat this

1 entirely as sort of an after the fact
2 consideration.

3 Let's do our fishery management
4 and then leave it to the people writing the
5 biological opinion to figure out what the
6 incidental take is and whether that's a
7 problem or not. In this case it was pretty
8 clear that there was a count problem and the
9 Council moved directly, under Magnuson
10 authority to regulate it.

11 Number two. When the Councils use
12 this authority, it certainly prevents the
13 situation of having any hard decisions being
14 made by people like myself who may not have
15 the full perspective on the fishery, the
16 participants, the social and allocation issues
17 that are within the Councils prevue, but not
18 really within mine.

19 And the Council process, which is
20 inherently open, with scoping and NEPA and
21 public comment, is also better suited to
22 arriving at those final decisions than the

1 biological opinion process which is not
2 inherently open. We're talking about maybe
3 ways that it could be, but inherently it is
4 not.

5 And then last. I think that, so I
6 think number one and two, that's the positive
7 that I would like to sell, but I think number
8 three that the Council has experience with
9 finfish stock assessments, which often
10 certainly leave a lot to be desired, but I
11 think they were particularly alarmed at the
12 uncertainties and data quality problems for
13 sea turtle stocks assessments and the
14 information available for decisionmaking.
15 Especially important ones.

16 Okay, and so --

17 MEMBER MORRIS: So Kevin, David
18 left you five minutes. So please, we'd like
19 to hear from you.

20 MR. ANSON: I think plenty of
21 time. Thank you David and I will go through
22 these fairly quickly in light of the time

1 constraints. Just as a primer for everyone,
2 I had joined the Council right around the
3 beginning of this particular ESA action and
4 Amendment 31, so I do not have a lot of long
5 term history from the Council perspective, but
6 anyways I will provide what I have.

7 And NMFS provided information
8 early in the process, as David had reviewed.
9 However the loggerhead sea turtle stock status
10 information was not provided until the meeting
11 where Amendment 31 was ultimately approved and
12 sent to the Secretary.

13 And so there was a concerted
14 effort looking back on it in hindsight and
15 reviewing minutes from the meeting. That was
16 concerted effort to try to meet the, I hate to
17 call them demands, but the Council dealing
18 with finfish stock assessments as you all are
19 familiar, has relatively large amounts of data
20 sets.

21 But they were surprised at how
22 little data was available. But yet NMFS staff

1 was able to provide some information
2 throughout the ESA process and amendment
3 development.

4 And the comments as David
5 mentioned, provided by the Council members
6 during the meeting ultimately became the basis
7 for some of the RPMs. Again, they followed
8 with the actual approval of the amendment and
9 so there was not much time to or really
10 necessary for Council to go ahead and review
11 those and provide additional comments. One of
12 the things that was mentioned, however in the
13 RPM, was a specific one. RPM 3, where the
14 science center was going to make a concerted
15 effort to try to address some of those
16 concerns that the Council had mentioned,
17 relative to the data that was provided.

18 One being robustness, more
19 coverage within the observer programs that
20 formed the bases of determining takes. And
21 then also trying to improve the stock
22 assessment. As David mentioned there were

1 quite a few inconsistencies or the outcomes
2 that were generated from the stock assessment
3 and stock analysis really left a lot to be
4 desired. Next slide please.

5 So again, talking a little bit
6 about some of the concerns for the available
7 data. Low observer coverage, less than 2.2
8 percent. There's lots of variability within
9 the data that was captured in the observer
10 program.

11 There was some question as to the
12 temporal and spatial coverage of the actual
13 observer trips. And the recommendations from
14 one of the reports made on the initial
15 assessment on takes estimated a three to five
16 percent coverage would be necessary to capture
17 that fishery effectively. So essentially
18 almost a doubling of observer effort was
19 needed.

20 Although observer and nesting data
21 were the best available as determined by the
22 SSC, the Council preferred a stock assessment

1 of sea turtles. Which included takes from all
2 anthropogenic sources.

3 This was one of the issues, I'll
4 mention this on the next slide. But in terms
5 of dealing with jeopardy and again, dealing
6 with finfish stock assessments, the Council
7 has a target number if you will, which it
8 shoots for in trying to develop its management
9 for the various species.

10 And it really wasn't anything that
11 could help the Council in driving towards
12 specific management measures to avoid
13 jeopardy, when it went through consultation in
14 the BiOp. Again, going back to the data.

15 The bait size/preference for adult
16 loggerhead turtles. There was information
17 provided from other areas, in other fisheries,
18 that was used as a proxy to try to look at
19 particular management measures that may have
20 been easily implemented and more readily
21 accepted by the fishery.

22 But there was wasn't much data and

1 so they were deemed not practicable to try to
2 substitute or try to look at some of these
3 alternatives. Next slide please.

4 And the Council overall felt the
5 available data was inadequate to effectively
6 address specific issues in the bottom longline
7 component of the fishery. The stock status no
8 longer had sea turtles lack basic lack of
9 history information, which greatly influenced
10 stock projections.

11 And that was one of the
12 recommendations I guess that was generated
13 from the consultation, is that there wasn't
14 going to be a more concerted effort to try to
15 fill in that information that was determined
16 to be lacking in the stock assessment.

17 And Council members struggled
18 with, to select action alternatives. Again,
19 to reduce sea turtle bycatch. When NMFS could
20 not provide and it may have been because of
21 the way the act is set up, but they could not
22 provide an estimate of bycatch reduction

1 needed with the fishery to avoid jeopardy.

2 So we were kind of left making our
3 best case to shoot for the jeopardy number
4 that was listed in the 2005 biological
5 opinion, was the best advice that we were
6 given to try to reach that number. And it
7 would be helpful if reduction targets were
8 available at the start of the amendment
9 process to guide Council decisions on
10 practical measures, which avoided jeopardy
11 while minimizing impacts to the fishery.

12 And overall looking, again, we
13 haven't much or I haven't personally had much
14 experience with ESA interactions, with the
15 fisheries we manage.

16 But certainly from this
17 prospective and with learning more about the
18 Hawaii longline situation from the
19 presentation today, is that I felt like we
20 were more involved or were looking at the
21 subject from an action agency perspective,
22 working hand and hand with the regional office

1 and the center to try to come up with measures
2 and means that would solve the problems that
3 were inherent with the fishery, as it related
4 to ESA. That's all I have.

5 MEMBER MORRIS: Thank you, Kevin.
6 We've all been sitting here in hard chairs for
7 quite a while, so I think it's time for a
8 break. But are there a couple comments to
9 make before we break? Keith?

10 CHAIR RIZZARDI: Thanks,
11 everybody, for these presentations. First
12 I'll say, I'm going back to my model before of
13 process and substance. It seems like the
14 process was a little bit better this time
15 because there was so much up-front
16 coordination and the Council was involved in
17 the formulation of the agency action.

18 But I'm struck on the substance
19 side. Especially putting back to back with
20 Hawaii. At first the numbers of take here for
21 the same species gave much, much smaller
22 numbers that we were talking about in Hawaii

1 versus here.

2 So it kind of leads me to thinking
3 about this. And the first question I have is,
4 is there some effort by NOAA to ensure that
5 there's consistency and coordination across
6 the regions on things like the methods and the
7 models and the numbers of take that are
8 occurring?

9 And my second question is, are you
10 comparing the amount of take against some sort
11 of global overall number that's then allocated
12 to your different regions?

13 MEMBER MORRIS: Who would like to
14 respond? David.

15 MR. BERNHART: I guess I'll take a
16 shot at that. So in terms of, is there an
17 effort to be regionally consistent, yes, very
18 much so.

19 And Keith I think you remember the
20 pelagic longline issues in the Atlantic, which
21 had even more in common with the Pacific
22 scenario than this bottom longline scenario.

1 And we tried very hard to coordinate between
2 the East Coast and Hawaii in that
3 circumstance.

4 There is not a worldwide
5 allocation. I think what there is, is
6 hopefully a consistent application of the kind
7 of approach that Craig laid out of moving
8 through with your particular analysis, with
9 you particular populations that are affected,
10 through his little box assessment structure to
11 get to your jeopardy decision.

12 Since both of these biological
13 opinions -- we've now separated loggerheads
14 into separate DPSs so we wouldn't be ever
15 comparing the Hawaii to the Western North
16 Atlantic -- but I think that you are leading
17 to a good question of, how do we treat our
18 collective mortality sources versus just
19 looking at the one that's in front of you with
20 a particular fishery management action? And
21 I think that's definitely a place where we
22 have some room for improvement.

1 MEMBER MORRIS: I've got Tony and
2 then Marian and then Randy.

3 MEMBER CHATWIN: Well thanks again
4 for a really interesting presentation. I have
5 two questions. One is with regard to the
6 issue of the modeling.

7 Now we've heard those two
8 different examples. In both cases it sounds
9 like the models have developed as need arises.
10 And I imagine that takes a lot of energy,
11 effort and time. And having gone through
12 these experiences, is it now an effort to do
13 these modeling efforts and population
14 assessments proactively?

15 MR. BERNHART: I think Lisa spoke
16 to this a little bit in terms of the
17 priorities at Pacific Islands Science Center.
18 I know the Northeast and Southeast Science
19 Centers for the East Coast are discussing this
20 hot and heavy.

21 I think that the, well and not
22 just them. We had an NRC review of sea turtle

1 stock assessments and if, I'm probably
2 misquoting it a little bit, but I think one of
3 its primary findings was, we should probably
4 stop messing around developing more models and
5 spend more time collecting the life history
6 data to populate it accurately.

7 And that has definitely been a
8 high priority. But then there are also in the
9 last couple of years, thanks to some -- and
10 this is just for the East Coast -- thanks to
11 some collaboration between NMFS and Fish and
12 Wildlife Service and Navy and BOEM, we've got
13 a lot more field surveys going.

14 So in addition to trying to
15 develop demographic birth rates, survival
16 rates, mortalities, age at reproduction, which
17 is what we were lacking for the models here in
18 this reef fish. We're also trying to get
19 those field assessments to strengthen that
20 side of the house.

21 But to answer your question, I
22 suspect that things will go the way they've

1 always gone. When we really need to pull all
2 that information together, it will be dictated
3 by whatever the circumstances are. But
4 certainly a lot of effort is underway to
5 address the shortcoming that lead to this.

6 MEMBER MORRIS: Marian?

7 MS. MACPHERSON: Thanks, David and
8 Kevin, I really enjoyed the presentation. I
9 really like how proactive it sounded like you
10 guys were.

11 I'm just wondering what it was
12 like for your staff? Is that something
13 sustainable at the level of PR participation
14 and Council of process? And will you do that
15 continuing on a regular basis or what would
16 you recommend?

17 MR. BERNHART: Well, for us it was
18 a very intense year. Strictly from the PR
19 side, I think we all viewed it as extremely
20 positive.

21 I think that we enjoyed working in
22 a collaborative way with the SF side of our

1 own agency and with providing our expertise to
2 the Council. And seeing them use their tools
3 for endangered species management rather than
4 trying to use Section 7 as some arm-twister
5 after the fact or whatever.

6 So it was a lot of work, but I
7 think it is kind of the model of how we should
8 try to do it. Now, and I completely agree
9 with all of Kevin's sort of shortcomings
10 items.

11 But I still think, big picture,
12 this is perhaps the ideal approach. And
13 that's not to say that that is what you would
14 do in every case. But in similar
15 circumstances, I would gladly do it the same
16 way.

17 MEMBER MORRIS: Randy?

18 MEMBER CATES: I think I just want
19 to make sure I heard right. If I understood
20 you said that you're looking at the
21 populations in a regional box and not
22 necessarily a global box? Did I misunderstand

1 that?

2 MR. BERNHART: Well we do have to
3 make our, as Craig said, we have to make our
4 ultimate jeopardy determination on the species
5 as listed. But Craig also laid it out, first
6 let's look at, alright what's the fate of
7 individuals, what's then the impact on their
8 overall life history.

9 Okay, maybe you killed one but it
10 wasn't reproductive anyhow, no effect on the
11 overall population. Or maybe your killing a
12 lot of adult females. Let's look at
13 reproduction, let's look at long term trends
14 in that.

15 Let's say Florida nesting
16 population. If that's not the species, the
17 entity that's listed, then you have to take
18 that analysis to the next step.

19 Okay if we do this to the Florida
20 loggerheads, what does that mean for the
21 entity that's listed. Which right now is the
22 Northwest Atlantic population.

1 But at that time was the global
2 population. So if we were real seriously
3 concerned about jeopardy we would have to have
4 gotten to that step.

5 MEMBER CATES: This has been a
6 major problem in Hawaii with the green sea
7 turtles. The science has not been done. Its
8 been requested to be done for numerous years.

9 And the argument by the NOAA
10 scientists is that they cannot look at it as
11 a distinct population, but a global
12 population. So even though the green sea
13 turtles in Hawaii are obviously rebounded,
14 they don't even want to look at doing the
15 science on it because they're saying it has to
16 be a global population. And it's been a real
17 battle in Hawaii to the point where now
18 there's a lawsuit over it.

19 MR. BERNHART: I shouldn't comment
20 on what I don't know, but we did get a
21 delisting petition for DPSs, which is causing
22 us to look at the DPS breakup of green sea

1 turtles, much like we did for loggerheads. So
2 that's something that's under way, litigation
3 free, but petition driven right now.

4 MEMBER CATES: And that request
5 first came in 2006 at MAFAC. Why the science
6 hasn't been done and West Pac had requested
7 it, I think in the '90s, and that was where
8 the battle was.

9 And to the point where there were
10 big meetings in Hawaii and then the Hawaiian
11 Civic Club said, well, we have to threaten to
12 sue to even get the science done. And I just
13 feel that's not a way to really do business.

14 MEMBER MORRIS: Okay, because of
15 the long session we are going to take a break
16 now. For those of you at distance and
17 everyone else in the room, we'll reconvene in
18 15 minutes at 3:45 Eastern time.

19 And we're running about a half
20 hour behind in our schedule, so make good use
21 of your break and come back ready to listen
22 attentively to the next case study.

1 (Whereupon, the above-entitled
2 matter went off the record at 3:32 p.m. and
3 resumed at 3:44 p.m.)

4 MEMBER MORRIS: Okay, everybody in
5 the room, if you could take your seats and
6 give your attention to Bob and Dawn, we'll get
7 started on the Lower Columbia River Chinook
8 Salmon Case Study 3.

9 Okay, who is going first: Bob or
10 Dawn?

11 MR. TURNER: It's Bob and Dawn and
12 I think Chuck.

13 MEMBER MORRIS: Oh, Bob's here?

14 MR. TURNER: Oh, excuse me, yes.

15 MEMBER MORRIS: Oh, thank you.

16 MR. TURNER: Yes, sorry. I think
17 so. I think Dawn is in Hawaii and if I'm not
18 mistaken, Chuck Tracy is Dawn's deputy at the
19 Pacific Council and Dan Wolford is the Chair.
20 I hope they'll both chime in anytime they
21 would like.

22 I'm Bob Turner, I'm the Assistant

1 Regional Administrator of the Northwest Region
2 for the Salmon Management Division. The
3 Northwest Region has a Salmon Management
4 Division in addition to Sustainable Fisheries
5 and PRD, unlike, I think, any other region in
6 the country.

7 And actually, as I listen to this
8 discussion, that may become part of the story.
9 I think it's a good thing that we're here, I
10 think.

11 We've been asked to give this,
12 which is a good story about a new harvest
13 management regime that was put into the
14 Pacific Council Fisheries for North of Cape
15 Falcon. Oh, I think I have to do something
16 different.

17 This presentation is in two parts,
18 there's a bunch of slides that'll give some of
19 the substance of what we did. I'll try to go
20 through this really quickly. Then there's
21 just a few slides that talk about the process
22 and why, at least we think, and I think the

1 Council thinks, it was successful.

2 This is, as I think most of you
3 know, salmon are anadromous, they spawn in
4 fresh water and go out into the ocean. The
5 little map shows you the portion of the
6 Columbia River Basin where Tule Fall Chinook
7 are produced.

8 It's largely the lower Columbia
9 river. The bulk of the fish are produced in
10 hatcheries that are federally funded by NMFS
11 in the lower river. The colored map is all
12 the sub-basins of the Lower Columbia, the
13 tributaries upon which most of these
14 hatcheries are and where these fish spawn.

15 They are listed under The
16 endangered Species Act. The fisheries, the
17 PFMC manages the fisheries. The ones that
18 we'll be talking about here are what the
19 Council family calls north of Cape Falcon.

20 North of Cape Falcon is just at
21 the bottom of this map in Oregon, that's about
22 200 miles of coastline and the Tule Fall

1 Chinook migrate out of the mouth of the river
2 down there at the bottom and turn north,
3 generally, and are caught substantially in
4 these fisheries.

5 This pie chart shows you where
6 Tule Chinook are caught throughout the coast,
7 and it's indicative of what I was just saying,
8 the blue portion is Canada, that's the biggest
9 chunk of them, 40 percent or so.

10 Ten percent or so are caught in
11 Alaska. The red part is the PFMC-managed
12 ocean fisheries north of Cape Falcon. The
13 river, the Columbia River itself is the 20
14 percent in green. Or excuse me, the 20
15 percent in yellow.

16 And the small slice that you can't
17 even see is in other places, and it's largely
18 tributary catches, is the 1 percent.

19 This pie chart shows the Pacific
20 Council Fisheries north of Cape Falcon and
21 what is in that fishbowl of Chinook caught
22 north of Cape Falcon, showing that over 50

1 percent of the Chinook are the Tule Falls
2 Chinook that we're talking about. The other 50
3 percent come from different places, including
4 Canada, Puget Sound and other stocks from the
5 Columbia River.

6 So if you combine those two, what
7 you see here is that roughly 30 percent of the
8 Tule Fall Chinook production, that is, in the
9 left half, provides 50 percent of the catch in
10 the PFMC Fisheries and is why the Council
11 focuses a lot on Fall Chinook, because it's
12 very important to their fisheries.

13 As I mentioned, these fish are
14 listed under the Endangered Species Act. This
15 is the wild component of them over time. This
16 is the hatchery component over time, scale
17 matters in these two graphs.

18 And in order to kind of equate
19 them, I put them together, roughly. So what
20 you see is the wild component, that's
21 naturally spawning Tule Fall Chinook; the
22 hatchery-bred Fall Chinook are on the bottom.

1 And it's, the ESA, obviously, is focused on
2 the top part.

3 Harvest management is focused on
4 the top part. So our harvest, our
5 exploitation rates for Fall Chinook are
6 established based on the impact to the small
7 graph on the top, not the large graph on the
8 bottom.

9 The Lower Columbia River Tule
10 stocks were listed in '99. We have generally
11 recovery plan in process going on throughout
12 the Northwest for listed populations. Most of
13 them, and the Tule Fall Chinook population is
14 one of the most advanced in terms of
15 development of a recovery plan, of any of the
16 populations listed in the Northwest.

17 Both Washington and Oregon have
18 components in the recovery plan. They have
19 been rolled together into one plan, and it
20 calls for what is known in the Northwest as an
21 All H solution, which addresses the four major
22 factors that are limiting most salmon

1 populations' habitat.

2 Hydropower, Hatcheries, and
3 Harvest. I'm focusing on the Harvesting
4 section just for the sake of history, you saw
5 those pie charts. Prior to listing, the
6 harvest rate on Tule Fall Chinook was as high
7 as 80 percent.

8 And just prior to listing, it was
9 49 percent. It had dropped over time. And
10 since listing, this is what the harvest rates
11 have been under a regime that had what we
12 called a fixed harvest rate approach to
13 management.

14 So we went from 49 percent to 42
15 to 41 to 37. And in that biological opinion
16 for the 37 percent, we said that in the next
17 year, so the biological thing had stated that
18 if nothing else happened, in 2012, the harvest
19 rate would be 36 percent and we basically were
20 telling people informally that we were going
21 to ride this harvest rate right into the
22 ground if we didn't get together with the

1 other three H's and start, basically, in this
2 case, improving habitat productivity for this
3 population.

4 The harvest sector and the Council
5 said, is there not a better way to approach
6 this harvest management regime? And we said,
7 well, let's give it a shot, basically.

8 Just to go back a step, though,
9 each one of those harvest rate bars was
10 associated with a biological opinion that
11 reached no jeopardy.

12 That biological opinion is based
13 on what is becoming more and more well known
14 in the Northwest as a population viability
15 analysis. It focuses on four attributes of
16 salmon populations: genetic diversity,
17 geographic diversity, demographics and
18 productivity.

19 It's very complicated, and as I
20 sort of joked here, it's not a black box, but
21 it's pretty gray. Technical people are
22 comfortable with it. The further away you get

1 from technical stuff, the less familiar you
2 are with it.

3 But I think, you know, as we get
4 to the lessons learned, one thing that is true
5 is that, you know, we've had listings in the
6 Northwest for 20 years. We've done a lot of
7 them and that we're data-rich, generally. We're
8 data-rich in particular on Tules. People are
9 comfortable with the fact that we do a lot of
10 modeling, there are a lot of smart people who
11 do this stuff, and when they present it to
12 folks, it's given a considerable amount of
13 credibility.

14 Whether that's by us, or in this
15 case example, by an independent contractor.

16 Yes, Dan?

17 MR. WOLFORD: This is Dan Wolford,
18 if I could jump in here and, you know, this is
19 quite different from the case we just heard
20 about from the Southeast where there was not
21 a clear objective in terms of what was
22 necessary to achieve a no jeopardy condition.

1 Here we have very clear direction
2 about what we needed to achieve, but from the
3 Council's perspective, we had very little
4 insight into how these numbers came about.

5 And as a consequence, we were very
6 concerned about where this was going and how
7 these numbers were derived. So that's what
8 led us to ask for this please look for another
9 way, kind of thing.

10 We were very concerned about where
11 we were going with this.

12 MR. TURNER: Thanks, and please
13 jump in anytime, Dan or Chuck. So this
14 particular model, incidentally, it was
15 presented along the way to those who were
16 involved in the development of this abundance-
17 based approach by the independent contractor
18 modeler, who was excellent.

19 And financially supported by the
20 council in every respect. I don't think we
21 would have been successful without that
22 support from the council for the modeling.

1 But basically, what we were
2 calling for, what the question was, was, could
3 we apply to Tule Fall Chinook something that
4 is emerging in salmon management? I call it
5 an increase in sophistication of harvest
6 management.

7 Which sort of in the old days, and
8 still today, in some cases, where you manage
9 for a fixed escapement objective of X numbers
10 of fish spawning in a river. That has a lot
11 of problems with it that we don't need to go
12 into.

13 But basically, if you err, if you
14 make a mistake in management and you were
15 targeting for a fixed escapement goal, it can
16 have very catastrophic effects. The
17 consequences of error in that system are high.

18 Many harvest regimes for salmon
19 stocks have switched to what's called a fixed
20 exploitation rate, where you're going to take
21 a constant percentage of the fish in any given
22 year, regardless of its abundance. That

1 moderates the consequences of error.

2 The third and more sophisticated
3 approach, which is the one we were asking the
4 question whether we could apply here is
5 whether you can have an exploitation rate that
6 varies based on abundance.

7 And the graph down below shows the
8 difference between the two. It's a little
9 complicated. The purple dashed line is the
10 fixed exploitation rate of 37 percent, which
11 is the last bar in that graph that I showed
12 you before.

13 That was the old management
14 regime. The question was, could we apply the
15 stair step approach that's in this graph,
16 which is an abundance-based exploitation rate.

17 And reminding you that the rate is
18 set on the abundance of wild fish. Wild fish
19 are far more difficult, the abundance of wild
20 fish are far more difficult to predict than
21 hatchery fish, that you can't get your hands
22 on them like you can hatchery fish.

1 You don't know how many go out,
2 it's difficult to tell how many come back.
3 You can't apply math to it very well. So there
4 was a whole bunch of questions that had to be
5 answered technically to determine whether we
6 could make this shift to a different
7 management regime.

8 But we decided to try. I probably
9 will come back to this process checklist, but
10 because there are steps along the way that are
11 more important than others, but I want to
12 emphasize, there was a two-year effort and
13 involved a lot of people and a ton of
14 interaction between the harvest sector, the
15 technical sector, the National Marine Fishery
16 Service, and the Council itself.

17 I think I'll go forward a little
18 bit for the sake of time and come back. But
19 one key thing was that, early on, both the
20 Council, the harvest sector, and the national
21 Marine Fishery Service, from an EF brig,
22 wearing our ESA logo, came to the question

1 with the objective of having what we came to
2 know as a win/win situation where the
3 harvesting sector would see a benefit over a
4 fixed exploitation rate.

5 So could they, over time, be
6 viewed as harvesting more fish than they would
7 under a fixed exploitation rate at varying run
8 sizes over a course of years.

9 And secondly, could we reduce the
10 risk of extinction over time by using an
11 abundance-based approach over the fixed
12 exploitation rate? And the reason why that
13 theory is possible, is going back to this
14 stair step, a reduced harvest rate at low
15 abundance gives a bigger conservation boost to
16 the population than you lose at a higher
17 harvest rate at high abundance.

18 So we were saying, if we can get
19 our paycheck at low abundance, then the
20 harvesters can get their paycheck at high
21 abundance. And the issue becomes, how often
22 over -- and this was modeled, basic modeling

1 scenario here was 1,000 iterations over a
2 hundred-year period.

3 So when you come to a conclusion
4 about whether you're going to get an increased
5 risk or a decreased risk, an increase in
6 harvest or a decrease in harvest, that outcome
7 is a result of running that model a thousand
8 times over a hundred years.

9 So a hundred years of abundance.
10 And this is what the output gets you. So I
11 don't want to dwell on this, but the tiers in
12 this graph are the breakpoints in the
13 population estimate. So the 30 is 30,000 Tule
14 Fall Chinook, Column Number 2 says 30 to 40,
15 that's a run size of 30,000 to 40,000. Column
16 3, 40,000 to 80,000 and over 80,000. The
17 rates are the harvest rates applied to those
18 tiers and then the number of years out of a
19 hundred that you're likely to fall into those
20 tiers is the frequency.

21 And then the analysis of the
22 win/win is in the final, couple-three columns

1 there. The green row is the scenario that was
2 actually selected ultimately. You can see
3 that it's entitled 68H2, which means that
4 there were at least 67 H-somethings before.
5 There were hundreds of scenarios run and
6 analyzed and digested by the folks who made
7 the recommendation to the council and were
8 ultimately considered by the council.

9 So a couple of things on why, so
10 I'm shifting from, that's the factual
11 situation that led to the consideration of the
12 proposal. I want to go back into why it
13 worked, a little bit.

14 First of all, going back to the
15 schedule, you'll see back in 2010, the council
16 formed an ad hoc group called the Tule Work
17 Group that was asked the technical question,
18 can it actually be done. Can you predict the
19 abundance of wild Tule Fall Chinook and if so,
20 can you establish a harvest regime?

21 That work group itself established
22 its own credibility by its membership. So we

1 had the Northwest Fishery Science Center on
2 that group, a member of the Northwest Fishery
3 Science Center is Chair of the Council's
4 Scientific and Statistical Committee.

5 My staff, we had two of my staff
6 on it from the Northwest region. The Columbia
7 River tribes were members, Oregon Fish and
8 Wildlife had three members, Washington had
9 two. The Makah Tribe, which has a substation
10 troll fishery in Northwest Washington was on
11 it.

12 And Chuck was on it from the
13 council staff. But most important, as I
14 mentioned, was Ray Beamesderfer from Cramer
15 Fish Sciences was the modeler for the effort
16 and was terrific at translating the science
17 into the considerations for all the rest of us
18 to think about.

19 MR. WOLFORD: Yes, Bob, let me
20 just comment on that. There was a lot of
21 council, and as you can see here, the fishery
22 agencies involved there, the credibility of

1 this work group was just outstanding.

2 They got us off on the right foot,
3 just incredibly, incredibly well.

4 MR. TURNER: And that group issued
5 what I have called a user-friendly report. So
6 while it is substantially technical in nature
7 it was very readable and digestible by not
8 just the managers, the council itself, but
9 also the fishing sectors, sport, commercial,
10 tribal, and was well received.

11 Going back up to the schedule,
12 again, that report came to the council in
13 September, I believe. It went to the
14 Scientific and Statistical Committee. They
15 came back and said, yes, we've looked at it,
16 work's credible. Scientific integrity.

17 And it also went to what's called
18 the Salmon Advisory Subpanel, which is the
19 harvesting sector of sport, commercial, and
20 tribal part of the council. And Ray
21 Beamesderfer explained the entire analysis
22 modeling effort to them and worked with them

1 on, worked with the SAS on these multiple
2 scenarios so that the SAS could become
3 comfortable, not only with the data and the
4 scientific integrity, whether the regime could
5 be defensible.

6 But also, with the outcome on the
7 harvest side of that win/win category. So you
8 see in the green bar row, the analysis led to
9 a 5.9 percent increase in their ability to
10 harvest Tule Fall Chinook over a hundred
11 years.

12 They also, as you can see, arrived
13 at an option that was a 3.7 percent reduction
14 in risk. The goalpost that was agreed to by
15 the council family was 3.5 percent, with a 3
16 percent increase in harvest.

17 As the SAS went through its
18 deliberation, you see they passed over several
19 that met the bar and went beyond the
20 conservation requirements that we had
21 established as sort of what we were looking
22 for.

1 And that is just totally due
2 credit to them for putting the stake in the
3 ground in wanting to ensure that this effort
4 was perceived as truly a win/win, conservation
5 as well as an increase in harvest.

6 MR. WOLFORD: Exactly right. And
7 I think one of the reasons that they were able
8 to do that was because of the willingness to
9 open the science to this advisory sub-panel.
10 When Ray Beamesderfer came in and explained
11 what was going on and how he was doing it, the
12 advisors of that panel really came on board
13 with this and was able to embrace the
14 methodology and the goals and objectives.

15 And I think that enabled them to
16 go to these, to make this thing really work in
17 the end, accomplish something that was beyond
18 just the minimum requirements.

19 MR. TURNER: So from my
20 perspective, none of this could have been
21 nearly as successful from, at least from a
22 perspective of acceptance by all of the

1 concerned entities, council, fishers,
2 ourselves, without the significant support of
3 the council itself.

4 I mentioned financial support,
5 that was certainly important, but it wasn't
6 solely financial. The council took the
7 leadership role in public outreach, being open
8 to convening meetings of its entities, the
9 SSC, the Salmon Advisory Subpanel, et cetera.

10 It was brought to the council
11 repeatedly, including once in November of 2011
12 where the entirety of the analysis was
13 presented to the council. And as I mentioned,
14 the support for the modeler.

15 The Salmon Advisory Subpanel, not
16 to repeat myself, but they took the lead in
17 developing the actual scenario that was
18 presented to the council for its adoption as
19 a win/win solution.

20 We spent a lot of time, my staff
21 did, I did, with the SAS. It was a really
22 tremendous experience to see them kind of

1 grapple with the various issues. It was a lot
2 of risk associated with the harvest side of
3 this for them, as well.

4 They took a leap of faith to adopt
5 this just as we did. And they ultimately did
6 make a strong recommendation to the council,
7 that's a repeat of what it was.

8 In terms of, because of the
9 context of this meeting is about biological
10 opinions, I haven't gone into great length
11 about the science behind this other than the
12 modeling. But one of the reasons I think
13 we're here is, in preparing for this meeting,
14 I kept stressing that this might be viewed as
15 a good model, but I want to be sure everybody
16 understands, we did not share, nor do we
17 support, nor would we share the biological
18 opinion with the council, nor a draft of it.

19 And one of the reasons, just one
20 of the reasons, is this schedule. Salmon
21 management in the Northwest starts with the
22 prediction of abundances of the many

1 populations that are contributing to the
2 fisheries.

3 Those predictions are not
4 available until about January and February of
5 any particular year. The council's first
6 meeting to seriously consider salmon
7 management for a given year occurs in March
8 where they develop three alternatives for
9 public review and then they immediately return
10 in the first week or two of April to adopt the
11 fishing regimes, which are then, which then
12 begin on May 1.

13 So we have to, we turn from
14 council action, in this particular case, the
15 council took action on April 6. The fisheries
16 start on May 1. We issued the biological
17 opinion on April 26. There is absolutely no
18 time between April 6 and April 26 for exchange
19 of views about the draft biological opinion.

20 So to be successful, we, at least
21 I, and our staff currently, we will do
22 anything we can to open up our thinking about

1 fishing regimes to the council well in
2 advance.

3 Since about the end of the 1990's,
4 we send a formal letter to the council as
5 early as we can, which turns out to be March,
6 again, explaining to the council what we
7 think, we call it guidance, but it's basically
8 what the ESA criteria for that year will be
9 for all of the listed populations that the
10 council has significant effect upon.

11 That's about 9 of the 28
12 populations that are listed in the Northwest.
13 So we have a multi-page letter that says for
14 each one, what the ESA bar is likely to be.
15 Now, we can't definitively say it, because we
16 don't want to be pre-decisional, but the
17 council knows before it sits down at the table
18 in March what our, what we're looking for from
19 an ESA perspective.

20 And there is, Dan can speak to,
21 better than I, to what the council, how the
22 council grouses or doesn't grouse over that

1 letter. But the arguments about it occur
2 before the season setting happens.

3 Because again, this schedule is
4 what we're faced with at the back end of the
5 process.

6 MR. WOLFORD: Yes, and since you
7 opened the door, let me comment on that. That
8 letter typically causes us great consternation
9 because for the most part, we have not had
10 visibility. Now where did those
11 recommendations come from?

12 And the process that Bob just
13 described here really opened the door and the
14 window into all the, well, what's going on
15 behind that door? How did these numbers come
16 about? And well, just reduces the anxiety
17 level on the council just orders of magnitude
18 when we understand the framework about what's
19 going on with these recommendations.

20 What this process really did was
21 put that framework out there for us all to
22 really understand and appreciate.

1 MR. TURNER: I think, go ahead,
2 Chuck.

3 MR. TRACY: Yes, so yes, building
4 the framework was, that's just something the
5 council's been interested in a long time and
6 we've had other, we have a manual methodology
7 review process and we do get some exposure to
8 some ESA issues at that time, too.

9 But this one was the first one
10 that really involved the council and its
11 advisory bodies and its scientific groups from
12 the baseline.

13 But the key to this one working so
14 well, I think, was not just a quoting of the
15 framework, but getting the industry group, the
16 Salmon Advisory Sub-panel involved. As soon
17 as we determined it was feasible to go ahead
18 with this process.

19 Because they're the ones that,
20 they had to decide how this worked for them,
21 and they had to decide, you saw those tiers,
22 there are four tiers, if you look there's two

1 tiers, three tiers, five tiers, but on those
2 bottom tiers, what that means to them is with
3 Canada fishing taking 40 percent of the
4 impact, and other impact necessary for
5 survival federal trust responsibility, those
6 low tier years, some fisherman in the ocean
7 sit on the beach.

8 So that's, you know, it's
9 important for them to know, you know, how many
10 years are they going to have to sit on the
11 beach? And because salmon populations are
12 sort of auto correlated, it's not just, you
13 know, it's not just 11 percent of the catch
14 and it's usually going to be two or three
15 years in a row to make up that 11 percent of
16 the time.

17 So that's why it's so important,
18 in this process, to get our salmon advisor
19 involved and to provide policy guidance to the
20 council and to them, in regards to how these
21 tiers are structured, how those really affect
22 their fisheries.

1 You know, if they're going to sit
2 on the beach, they're going to need some make
3 up time and time to buy abundance. So, you
4 know, what does it take to offset that?

5 So that's what really made this
6 process so valuable for our fishing industry.

7 MR. TURNER: Just to emphasize the
8 point that Chuck was making, those
9 exploitation rates that I mentioned are for
10 everybody.

11 So the Alaska, Canada, PFMC
12 fisheries, the in-river fisheries, all are
13 combined into that one harvest rate that we
14 established. But when it goes down, when that
15 harvest rate goes down, virtually the only
16 place to take the reduction is in the PFMC
17 fisheries.

18 You can't take it out of Alaska,
19 you can't take it out of Canada. We have a
20 treaty with Canada that doesn't allow that to
21 occur. And while the PFMC catch involves both
22 tribal and non-tribal, most of their harvest

1 in the ocean is non-tribal.

2 And it's very difficult for
3 practical matters, to take it out of the
4 river. So a 1 percent reduction, if that were
5 to occur, because of the way these two pie
6 charts interact, 1 percent reduction causes
7 the ocean fishery to lose access to a vastly
8 larger number of other populations that, it's
9 up, and has a very dramatic impact.

10 And that's why it was particularly
11 concerning to them. I will also say that, as
12 many of you know, the Pacific Council manages
13 fisheries along the west coast, south of
14 Alaska in the U.S. waters. They deal with two
15 regions, the Southwest Region and the
16 Northwest Region.

17 In the Northwest, both Randy and I
18 have been involved in fisheries management in
19 the Northwest for a long time. I would say
20 because of the need to share information with
21 tribal governments, and because fish are
22 migratory, the notion of opening up the

1 management box to other people is not foreign.

2 I mean, it's common, because
3 everybody gets into this mix together and in
4 fact, has to in order to comply with court
5 orders. In order to implement treaty Indian
6 fishing rights.

7 And so the idea, to me, of letting
8 the council see our laundry from day one to
9 the day end is, I'm a hundred percent
10 comfortable with it. You know, I'm not quite
11 sure that that's, I think that that is a
12 legacy of 20 years of dealing with Indian
13 tribes, frankly.

14 And so I wouldn't necessarily say
15 that that's true. I wish it was only 20
16 years. If that's true, I'll swear. So,
17 questions?

18 MEMBER MORRIS: Okay, questions?
19 Best practices? Areas for improvement?
20 Questions and comments? It seems to me, that
21 in this example, your --

22 MS. CAMPBELL: This is Cora

1 Campbell, I have a question.

2 MR. TURNER: Yes?

3 MEMBER MORRIS: Cora, go ahead.

4 MS. CAMPBELL: Oh, thanks, I'm
5 sorry. I thought we had a couple of people
6 talking at once, there. I was just curious if
7 somebody could explain a little bit more of
8 the level of detail that's provided in the
9 letter that's received by the council that
10 talks about sort of annually what the jeopardy
11 bar is.

12 Because one of the challenges that
13 we faced in the north Pacific is that the
14 council has been asked to be involved in the
15 development of reasonable and prudent
16 alternatives without a clear understanding of
17 what that standard is.

18 And that's been very challenging
19 for us.

20 MR. TURNER: Chuck, do you want to
21 answer that from the council's perspective?

22 MR. TRACY: Sure, I'll take a shot

1 at that. So the guidance letter this annual
2 guidance letter, for the most part, you know,
3 if there's a biological opinion in play, that
4 summarizes the, you know, the, what's in
5 there. So what's been published, what
6 everybody knows.

7 Where it comes into play is, when
8 there's a new consultation going on and we
9 each have a biological opinion that's expiring
10 and there's going to be a new opinion and it
11 isn't out yet, that's when it becomes real
12 important, you know, to get that information
13 up front.

14 So the National Marine Fisheries
15 Service can provide us their best guess or
16 their, you know, where they're leaning or what
17 we ought to consider in terms of meeting
18 conservation objectives in our, when we're
19 formulating our regulations for those stocks
20 that have new information coming, or new
21 computation coming.

22 So that, you know, that's where it

1 gets real critical. Again, because of the
2 life history of salmon and, they're
3 short-lived, things change year to year, you
4 know, trying to use the best available
5 information and the most recent constrains our
6 time immensely.

7 And so it is difficult for the
8 region to get that guidance based on the most
9 recent forecast, most recent statement
10 estimate to the council and it, you know, much
11 in advance. So it, like everything else,
12 comes in March.

13 And we have that compressed time
14 schedule to deal with.

15 MR. TURNER: Yes. Well, I would
16 add to that -- I think an observation about
17 organization and lessons learned and why this
18 was successful. In the Northwest region, as
19 I mentioned, that Salmon Management Division
20 writes the guidance letter, which means we are
21 establishing the expectations for jeopardy.

22 And we do the biological opinion

1 for the harvest management actions. And we
2 are involved in developing those harvest
3 management actions. So protected research's
4 division is not involved in these efforts at
5 any point along the way.

6 Now, I have had lots of
7 discussions about how that can make it appear
8 as though we have some conflict of interest.
9 I don't, you know, we're the national marine
10 fishery Service, regardless of how we
11 organize.

12 So I fundamentally don't agree
13 with that perception. But even if I did, my
14 belief is, the response to a concern about the
15 perception that we are not only, you know,
16 we're our own judge of action, here.

17 We formulate the action and then
18 we write our own biological opinion, the
19 solution to that is to sunshine the process
20 and let the science stand on its own
21 integrity. And the benefit of doing that is
22 that the relationships that the division has

1 with the harvesting sector, with the council,
2 are very important.

3 And the familiarity with the data,
4 again, because we're data-rich and it's a
5 complex management regime, I don't think we
6 have the money to have multiple divisions
7 familiar with enough familiarity to both
8 manage the fishery and be able to write a
9 biological opinion.

10 It'd be very difficult. And very
11 expensive. So I am a big advocate for, at
12 least in the salmon management arena, for the
13 people who are interact with the council, to
14 be able to explain, in advance, in our
15 guidance letter, in this case, what our
16 goalposts are, and then we'd write the
17 biological opinion in the end.

18 And because of our familiarity
19 with the subject matter, we're able to get it
20 done in that window of opportunity we have,
21 which is three weeks or less in April between
22 the action adopted by the council and the

1 issuance of the biological opinion.

2 MR. WOLFORD: I think the timeline
3 there makes it kind of critical that we kind
4 of all embrace that approach. The guidance
5 letter is sufficiently detailed that we were
6 able to extract from that, measures by which
7 we can assess the various fees and structures
8 and regulations that we consider each year.

9 Whether that will go through --
10 and various things, to me, meet the criteria
11 or not, to form fairly objective of criteria
12 out of that guidance level. That's very, very
13 helpful.

14 MEMBER MORRIS: Other comments or
15 questions? Pam?

16 MEMBER YOCHER: I've got a
17 question about how "best" is defined when
18 talking about best available information or
19 best available data. You indicated, for
20 example, that you had the involvement of an
21 independent contractor who was a non-NOAA
22 fishery scientist, funded by somebody other

1 than NOAA fisheries, as opposed to the data
2 actually coming from NOAA fisheries.

3 Some other standards that I know
4 are used are things like the Data Quality Act,
5 the Department of Health and Human Services,
6 for evidence-based medicine, ranks peer
7 reviewed science at four levels.

8 Level One being a controlled,
9 randomized clinical trial and level Four being
10 an observational study with no controls.

11 And so even though the data are
12 peer reviewed, they further rank, basically,
13 how good they are based on the methods that
14 were used to obtain the publishable result.

15 So I'm just wondering if, I don't
16 know who would like to weigh in on this, but
17 I'm just wondering how the best is defined.

18 MR. TURNER: Well, I think in this
19 case, and Chuck may know a better answer than
20 I have here, but first of all, the modeler
21 didn't develop the data. The data is
22 collected by management entities and is housed

1 by, most of it is housed in the Pacific States
2 Fisheries Management Council databanks or
3 other, and is accessible to everybody.

4 What Ray Beamesderfer did was use
5 the data in a model. Now the viability
6 modeling is something that I don't think was
7 his model, he may have been using our model.
8 But a viability analysis, what his, what
9 really added value that he brought was in
10 being able to model the harvesting scenarios
11 and translate it into language that the
12 council family could understand and could work
13 with.

14 But even then, the work was
15 reviewed by the Scientific and Statistical
16 Committee and again, to the credit of Don
17 McIsaac of the council and Chuck, they, I can
18 remember constantly being asked to ensure that
19 NOAA had involved, this is kind of, you talk
20 about turning the coin upside down.

21 It was the council asking us to
22 ensure we had all of our scientists involved

1 in the process upfront who would alter weigh
2 in on the biological opinion so that we could
3 surface any concerns that they were going to
4 have early and address them before we sat down
5 and wrote the biological opinion.

6 And we did exactly that. That was
7 a good point to be raised and we brought in
8 all of the people from NOAA that would have an
9 opinion about the kinds of questions you just
10 asked so that we could address those before
11 the action by the council was taken.

12 And any of those concerns were
13 addressed before the decision was made.

14 MEMBER MORRIS: So here's my
15 question again. How did it come to be that
16 the Protected Resources folks weren't involved
17 in the biological opinions for salmon? Is
18 that because it's a fish that's been managed
19 for a long time by the council process and so
20 it just kept being managed that way?

21 Or where was the decision point
22 that said, you know, this biological opinion

1 in this particular region for this particular
2 species will be handled by the Salmon
3 Management Division, not the Protected
4 Resources folks?

5 MR. TURNER: You know, I think it
6 was evolution. There was no decision point
7 made. That's also true in the Northwest
8 region for habitat consultations. In fact,
9 most of the consultations done in the
10 northwest regions are not done by Protected
11 Resources.

12 Most of the habitat-related
13 actions are done by the Habitat Management
14 Division. The Sustainable Fisheries in the
15 Northwest deals with ground fish to the extent
16 that they do consultations, they will do them.

17 Protected Resources does, ends up
18 with marine mammals, rockfish, some of the
19 other species that sort of don't fall into
20 ground fish and salmon. And I will, we also
21 have a hydropower division that no other
22 region has because of the Columbia River

1 federal hydropower system.

2 And they do the consultations on
3 the hydropower system.

4 MEMBER MORRIS: Okay, any other --

5 MR. TRACY: Whether the Columbia
6 river Tule just, you know, is region-wide for
7 many ESUs and for many different actions.

8 MEMBER MORRIS: Keith?

9 CHAIR RIZZARDI: I have a
10 question, I guess it affects all the folks
11 who've talked. I'm curious about the way that
12 the regions interact with headquarters and how
13 the PR staff all works together. You know, so
14 we've learned about regional BiOps and there's
15 regional staff and what happens at the
16 national level?

17 MS. GOLDE: So this is something
18 that is often very confusing to people. And
19 having come into fishery service from another
20 part of NOAA, they, many people even across
21 NOAA don't really understand this, so, and
22 that is, the way the regions are set up, the

1 regional staff, the Protected Resources
2 regional staff, don't report to us at
3 headquarters.

4 They report through their regional
5 administrator to Alan and then I report to
6 Alan, so the point where we meet is Alan's
7 desk, which is not to say that we don't talk
8 to each other. We talk to each other often.

9 And as David mentioned, we try to
10 be consistent across regions in how we think
11 about things. So what we do in headquarters
12 in Gina's division, which is our Section 7
13 Divisions, is we have some biological opinions
14 on large national issues of national scope
15 that we do in our office and the Office of
16 Protected Resources here in Silver Spring.

17 And we also provide training,
18 which is one of the primary things that Craig
19 does, is he goes around the country and
20 provides training around the country on how to
21 do biological opinions so that we build that
22 consistency in.

1 And we also are responsible for
2 national guidance. Now Gina is fairly new in
3 her position. We just split Section 7 off
4 into its own division in headquarters and
5 hired Gina to run that division.

6 And I know she's been thinking
7 about the kinds of additional guidance that
8 she wants to provide to our consultation staff
9 around the country and do things like, you
10 know, calls periodically to touch base on best
11 practices.

12 But I can tell you that there's a
13 lot of discussion amongst consultation
14 biologists around the country on things that
15 they, you know, are thinking about. You know,
16 I'll see e-mails comes across that says, hey,
17 I'm doing an analysis on this. Does anybody
18 have some experience thinking about this
19 issue? And if so, how have you addressed it?

20 So there's certainly a lot of
21 coordination. And one of our roles is to help
22 facilitate that coordination. Does that? I

1 don't know if you want to add to that at all,
2 Gina?

3 MS. SHULTZ: Then, I don't think
4 you mentioned the quality assurance, quality
5 control, that we also provide as well. So each
6 year, headquarters reviews the consultations
7 to see that it went through the right process
8 in each region and review a subset of the
9 actual biological opinion.

10 So we look at the process for all
11 of them, that they went through the right
12 review and signature. And review a subset of
13 the BiOps, in some cases where regions don't
14 do very many. Not like the Northwest, there,
15 it's truly a subset.

16 Some regions, it's all of the
17 BiOps that they issued that year. We review
18 them and sit down each year and go over what
19 we've found and identify areas where things
20 could potentially be improved.

21 Or if there are areas where we're
22 seeing, that's where we have the potential, if

1 we see something inconsistent or different,
2 then we can share that.

3 CHAIR RIZZARDI: So is there a
4 national template for a biological opinion or
5 a regional template for a biological opinion?
6 When you sit down and you start that process?

7 MS. SHULTZ: Well, we have,
8 nationally, I mean we, everything, you know,
9 you start with your ESA and our regs and our
10 handbook and guidance, and that all comes out
11 of the national.

12 And then I don't know that there's
13 a particular template, but really, if you look
14 at the handbook, it pretty much is a template.
15 Does that answer your question?

16 MS. VAN ATTA: Hi, this is Lisa
17 Van Atta, I just wanted to add one more point
18 that we didn't mention, which is, there's a
19 lot of collaboration and exchange of ideas on
20 the program side, but part of this QA/QC is
21 that all of our consultations, whether they be
22 informal or formal, have to go through a

1 review chain that involves our office of
2 general council.

3 And they get together every other
4 week and have calls about the ESA, which
5 involves, a lot of times, biological opinion
6 and questions of consistency on interpretation
7 of statutory terms. So while the program side
8 is coordinating, so is general council.

9 And then all of our opinions are
10 approved by our regional administrators. So
11 there really is a lot of QA/QC going on in
12 coordination at the different levels.

13 MEMBER MORRIS: Okay. If there
14 are no more general comments or questions,
15 we'll close this part of the Webinar. We ask
16 those of you who are actually members of the
17 working group to hang on, if you have the
18 time, for kind of a distilling session that
19 the working group will have as soon as the
20 noise in the room quiets down a little bit.

21 And so any MAFAC members or others
22 who aren't members of the working group who

1 would like to say, it's been a good day, I've
2 got other things I want to do right now,
3 you're welcome to depart.

4 And we're going just have a kind
5 of five minute break for things to sort out
6 and then the working group will start a
7 discussion, just try to pull together some of
8 the good ideas that came from today.

9 Gina?

10 MS. SHULTZ: Hi, I just wanted to
11 thank everybody for, all the presenters that
12 gave the case studies from the various
13 councils, and/or NMFS offices. Thank you so
14 much. We appreciate that.

15 MEMBER MORRIS: Right. Kudos from
16 the MAFAC team here as well. Very, clearly
17 you put a lot of effort into making clear
18 presentations, they're very helpful. We hope
19 you will send your PowerPoints to us so we can
20 refer to them in the future.

21 And we look forward to working
22 with you on these issues as we move forward.

1 (Whereupon, this matter went off
2 the record at 4:34 and went back on the record
3 at 4:38 p.m.)

4 MEMBER MORRIS: Okay, are we ready
5 to begin, then? Let's go around one more time
6 and introduce ourselves as working group
7 members, just to kind of remind ourselves who
8 we are. So I'm Julie Morris and I'm a MAFAC
9 member from Sarasota, Florida.

10 MR. BERNHART: I'm David Bernhart,
11 I'm with NOAA Fishery Southeast Regional
12 Office. I'm the Assistant Regional
13 Administrator for Protected Resources.

14 MS. SHULTZ: I am Gina Shultz, I'm
15 with NOAA Fisheries headquarters, Protected
16 Resources and I'm Chief of the Interagency
17 Cooperation Division.

18 MEMBER YOCHER: Pam Yochem, MAFAC
19 member from San Diego, California.

20 MEMBER MORRIS: Okay, we're just
21 focusing on the working group members right
22 now.

1 MEMBER BROWN: I'm Columbus Brown
2 from, retired from the U.S. Fish and Wildlife
3 Service. MAFAC member from Atlanta.

4 MEMBER CLAMPITT: I'm Paul
5 Clampitt, MAFAC member from Washington state.

6 MS. MACPHERSON: I'm Marian
7 MacPherson, I work for The Office of
8 Sustainable Fisheries, report into
9 headquarters, but actually live down on the
10 Gulf in Alabama.

11 MEMBER MORRIS: And Cora and Dawn,
12 are you still with us? Audio?

13 MRS. CAMPBELL: This is Cora. I'm
14 still here.

15 MEMBER MORRIS: Great, thank you,
16 Cora?

17 MR. WOLFORD: Dan Wolford, yes.

18 MEMBER MORRIS: Or Dan? Sorry,
19 Dan. Great. Okay, so I just wanted to --

20 MR. LYNCH: Hi there, this is Jim
21 Lynch, and I'm the acting representative for
22 West Pac on this as well for today.

1 MEMBER MORRIS: great, thank you.
2 So you're sitting in for Ed, right?

3 MR. LYNCH: Excuse me? I didn't
4 hear you.

5 MEMBER MORRIS: You're sitting in
6 for Ed. Thanks for reminding me.

7 MR. LYNCH: Yes, certainly, I'm an
8 alternate for Ed.

9 MEMBER MORRIS: Great. So I just
10 wanted to go back to our terms of reference,
11 which were distributed prior to the MAFAC
12 meeting, I don't know if all the working group
13 members received them.

14 But I just wanted to emphasize
15 that the Webinar was supposed to present
16 different case studies in which we would be
17 looking for best practices an considering
18 potential areas for improvement in ESA
19 consultations on MSA fishery management
20 actions.

21 Related to the types of
22 information and analytical methods used in

1 biological opinions and how ESA consultation
2 and MSA fishery management processes are
3 coordinated and carried out.

4 So in this session, we have about
5 a half an hour. I was hoping that we could
6 sort of pool ideas along those lines that came
7 up in the case studies and discussions today
8 and then have some time to figure out what the
9 next steps for the working group might be.

10 So let's start with what people
11 heard today or what ideas popped for them in
12 terms of best practices or potential areas to
13 do better coordination.

14 MR. WOLFORD: Well, this is Dan
15 Wolford, let me offer, then couple of things
16 I've heard. One was the matter of the
17 council's SSC. And in various times, the SSC
18 was either was involved, they seemed to be
19 good when it was not involved or where there
20 was data that was withheld from them as an
21 unpublished model in the case of the Hawaiian
22 situation or apparently there was certain data

1 that was withheld from them in the '12
2 opinion.

3 That seemed to be a critical issue
4 about how involved is the council's SSC in
5 this process? The other thing that I thought
6 was pretty clear was, there's, sometimes there
7 is and sometimes there is not a clear
8 statement of objectives about what's the
9 council need to do in order to achieve a no
10 jeopardy condition?

11 And I think the existence of that
12 criteria was very helpful to us on the Pacific
13 Council and I can see where not having that
14 would be a real impediment to others. So
15 those are the two kind of observations, I
16 think.

17 MEMBER MORRIS: Thank you, Dan.
18 Other things that struck people today as best
19 practices? Go ahead, Pam.

20 MEMBER YOCHER: Well I heard, I
21 think I heard three different approaches that
22 were used for ensuring coordination between

1 NOAA fisheries and the councils. One or
2 either existing situation or perhaps a
3 recommended situation.

4 And one was, I guess at one
5 extreme would be a policy change, which would
6 return the situation to where it had been
7 previously where the council has status as an
8 action agency.

9 And then I heard, I think, from
10 the other, two case stories that there were
11 two sort of voluntary, ad hoc-type of
12 situations that were used.

13 In the Gulf, there was an IPT,
14 Interdisciplinary Planning Team, made up of
15 NMFS and council members and I can't remember
16 if that was something where there's an MOU
17 established and it's a team that exists sort
18 of all the time or if it's just a case-by-case
19 situation.

20 And then for the salmon there was
21 the ad hoc work group that was formed that had
22 not only NOAA fisheries and council

1 representatives, but also state agencies,
2 tribes, and then this outside consultant.

3 And so that was I took away from
4 it, where there are three very different
5 approaches for coordination between the
6 council and NOAA fisheries.

7 MEMBER MORRIS: I can answer your
8 question about the IPT. It's a team that
9 works together for the development of all of
10 the fishery management plan amendments in the
11 Gulf Council. So it's just a way to bring
12 council staff together with Southeastern
13 regional NOAA fishery staff in the development
14 of any management action.

15 MR. BERNHART: But they
16 reformulate per the needs of the particular
17 amendment?

18 MEMBER MORRIS: Right. Marian?

19 MS. MACPHERSON: The common theme
20 that I heard was, there were successes when
21 people found ways to share information early,
22 whatever the name or the format that it took

1 on. And I'd also just like to comment that
2 some of the neat concepts I heard David
3 talking about in the Southeast are similar or
4 are taken from that draft 2005 document that
5 I mentioned.

6 So that might be another place to
7 mine for ideas.

8 MR. LYNCH: This is Jim Lynch,
9 just to kind of add a point to the policy
10 change issue. I think there are at least two
11 alternatives for policy change, either
12 considering councils to be action agencies for
13 purposes of these consultation activities, or
14 alternatively, they're considered an applicant
15 and, you know, if NOAA believes there's some
16 strong basis to not consider councils to be
17 action agencies and that this is an internal
18 consultation between fisheries and Protected
19 Resources, which I understand typically has
20 been the thinking.

21 So I think either of those
22 scenarios would provide sort of more formal

1 status in how the council and council staff
2 participate in the consultation process, if
3 it's by reviewing draft biological opinions,
4 being involved in the development of
5 reasonable, prudent alternatives in a more
6 integrated way.

7 So that's, I think, the goal, and
8 I think so there are two, at least two, policy
9 options there for interpretation and I think
10 that's probably what this group should think
11 through a bit more.

12 MR. WOLFORD: Well, as strange as
13 it might seem, this is Dan Woford again from
14 the Pacific Council, becoming a formal action
15 agency or an applicant, as you saw in Bob
16 Turner's last slide about the timeframe there,
17 I would have to impose a criteria that would
18 make that timeframe unworkable and while I
19 think we need to have more coordination and
20 more ability to interact, making that a formal
21 thing worries me a little bit in terms of the
22 impact that might have on our schedule.

1 MR. LYNCH: Yes, I think with all
2 things, I think schedules and, regardless the
3 status of anybody here, schedule is always an
4 issue. And I think one of the things that I
5 think applicants and action agencies do all
6 the time is develop schedules and have, you
7 know, an understanding over, you know, how
8 quickly draft biological opinions will be
9 turned around for review and all those types
10 of things.

11 So, you know, I think that can be
12 a part of the conversation, you know, when the
13 parties are interacting with each other, but
14 it shouldn't be an impediment to allowing, you
15 know, the improvement of the biological
16 opinions by providing drafts of those
17 documents and working together.

18 MEMBER MORRIS: Marian?

19 MR. WOLFORD: Yes, well I
20 certainly agree with that, but the idea that
21 there would be a draft biological opinion
22 created, sent to the council for review,

1 given, you know, three weeks to review it, get
2 back and comment on it, that would completely
3 take our salmon schedule and make it
4 completely unworkable.

5 I think the real criteria is for
6 us to work together in advance of that in, you
7 know, perhaps a less formal way.

8 MR. LYNCH: Yes, I guess, just on
9 the schedule point, I would say that the
10 council, I think, even if it's extended
11 actually into applicant status can always
12 waive that time period if you felt like timing
13 was more important than your opportunity to
14 review. So I don't think it should be
15 mandated, but I have to think that if you're
16 willing to waive it, then you should waive it.

17 And if you're comfortable with the
18 interactions you had up to the point of a
19 draft opinion, then you do waive it. And
20 there's no reason to have kind of the
21 formality of that review. But, you know, I
22 think typically, I think applicants, it takes

1 some time to put together a solid draft to
2 actually have a conversation.

3 And so there will need to be some
4 back and forth and efficiency, I think, just
5 to figure that out.

6 MEMBER MORRIS: Okay, there's two
7 people in the room who want to speak, so I'm
8 going to recognize them, okay? COURT REPORTER:
9 Was that person John who was speaking?

10 MEMBER MORRIS: John, you were
11 just speaking, right? The transcript, the
12 guy's keeping track of the transcript is
13 trying to identify your voice.

14 COURT REPORTER: That was John and
15 Dan?

16 MEMBER MORRIS: Yes.

17 COURT REPORTER: Okay.

18 MEMBER MORRIS: Marian?

19 MS. MACPHERSON: I just wanted to
20 point out before we go too far down the road
21 of action agency, I'm not sure that that's a
22 complete policy call. Maybe we should look at

1 the old memos, but before switching to OSF, I
2 used to work in GCF and we used to always get
3 councils dismissed from litigation on the
4 basis that they were not an action agency.

5 So whatever may have gone under
6 the bridge, we may need to run by GC whether
7 that's a legal possibility.

8 MEMBER MORRIS: It does seem like
9 in the Gulf of Mexico case study, the council
10 was sort of treated as if they were the action
11 agency, even though they weren't technically
12 the action agency, there was the sense that you
13 were keeping them informed.

14 I'm not sure if maybe I'm over
15 interpreting that. Keith? You had a comment?

16 CHAIR RIZZARDI: Well, the first
17 one was covered, which is, if you're
18 cooperating and coordinating while people will
19 waive the timeframes. The second one is on
20 this point about the action agency. I think
21 in the gulf example, it was working with the
22 council upfront and then on the backend there

1 was, yes, some communication.

2 But I wouldn't characterize it
3 necessarily as the full-blown treatment that
4 you would get if you were the applicant. I
5 think there probably is some legal review that
6 needs to be undertaken there.

7 But I think the bigger picture
8 point that everybody's getting is, it's a good
9 idea. And I think if you step back, the more
10 you get the communication on the front end,
11 the less likely you are to be dealing with the
12 litigation on the back end.

13 And you enhance your process, and
14 as a result, you'll enhance your substance.
15 And that's sort of my big picture theme. I
16 know I'm not formally a member of the working
17 group, I'm sort of stealing my ex officio
18 rights, if I can.

19 But a few things that struck me
20 today. The better communication theme was
21 heard over and over and over. Staff getting
22 involved up-front with the councils really

1 seemed to help.

2 And then soliciting feedback on
3 the RPMs and RPAs seems to be a really big
4 deal, too. And even if you can't formalize
5 that communication to make sure that it always
6 takes place, it would certainly be helpful.

7 You know, my point about reducing,
8 the risk of litigation remains. And on the
9 substantive side -- so those are sort of my
10 process points -- on the substantive side, I
11 saw the opportunity for some greater clarity
12 on how we make our decisions on the models
13 that are being used for jeopardy, on the
14 checklist that we use for jeopardy.

15 And I'm seeing that maybe there is
16 an opportunity to do some national-level
17 guidance and for the national office to issue
18 some directives to the regional offices,
19 especially given the way that NOAA is
20 structured.

21 And I think there's probably, as
22 we dig through this more, we're going to learn

1 there are more lessons like this. One of the
2 ones that really truck me was the Pacific
3 Northwest and their model being bought into by
4 the stakeholders.

5 And having this up-front approach
6 where they had stakeholder buy-in to the
7 science, and then the decisions that they're
8 making, and the jeopardy determinations that
9 they're reaching, are based on a model that
10 everybody's already weighed in on and agreed
11 to, which dramatically changes the risks of
12 controversy down the line.

13 That kind of thing could be
14 embraced at a national scale, put into some
15 national-level guidance, and then implemented
16 at a regional level.

17 And then another thing I saw,
18 picking up on some of the questions that Tony
19 was asking, it seems like there's an
20 opportunity to take the lessons learned in
21 each of our BiOps and create a feedback loop
22 on the research side of the equation as well.

1 And to somehow crystallize the process and
2 make it formal. And I'm sure it takes place
3 at an informal level. I mean, you've got a
4 whole bunch of intelligent professionals in a
5 room and they see a problem that pops up in a
6 biological opinion, they have a water cooler
7 conversation and the next thing you know, it's
8 on the research list.

9 But I see an opportunity to take
10 the gaps that are being overtly identified in
11 the biological opinions, you recognize best
12 available science, you recognize the
13 limitations of your best available science,
14 you've identified, you know, we really need
15 some more information about population of sea
16 turtles in this region, we need some more
17 information about the water habitat of the sea
18 turtles. And then to be able to turn that
19 information over to the folks who are doing
20 the research and to say, hey, here are applied
21 priorities and here are some things that we
22 really need to enhance our outputs on the

1 Protected Resources side.

2 MEMBER MORRIS: Paul?

3 MEMBER CLAMPITT: I hate to go
4 backwards, but I didn't quite catch how the
5 Hawaiian Longline Association became applicant
6 to this. Can somebody explain that to me?

7 MEMBER MORRIS: Yes, I didn't
8 understand that, either. What is an applicant
9 and how do they --

10 MS. SHULTZ: Well, I think they
11 sued for applicant status. It's my
12 understanding that they sued for applicant
13 status and the court granted it.

14 MR. LYNCH: That's right. This is
15 Jim Lynch. So the background there is Hawaii
16 Longline Association, in a challenge to a
17 previous biological opinion, I don't have the
18 slide in front of me, but I believe it was
19 back around 2001 or '02, challenged the way
20 the consultation occurred where Sustainable
21 Fisheries and Protected Resources consulted
22 with each other.

1 And the Agency's position in that
2 BiOp was that there was no applicant. And
3 that issue was challenged before a federal
4 district court judge in Washington, D.C. and,
5 you know, the ruling in that case was that HLA
6 was an applicant. Because if you read the
7 consultation handbook, you know, they're a
8 group of folks that require the approval of
9 the Agency to actually undertake an action.
10 So it's a pretty broadly-worded definition in
11 the handbook.

12 So on that basis, the BiOp was
13 remanded back to the Agency and HLA was, you
14 know, given applicant status.

15 So now we have this odd situation
16 here in this Hawaii fishery where the group of
17 industry vessels is an applicant. The council
18 is not considered an applicant and we comment
19 on draft biological opinions through HLA.

20 Which, you know, I mean, again,
21 it's kind of an odd situation, but that was
22 the end result of that district court

1 litigation. I do not believe that in any
2 other council area of the United States, that
3 other fishing groups are considered to be
4 applicants.

5 I think that's a limited precedent
6 for Hawaii, and NOAA can weigh in on that one,
7 but I think that, you know, certainly, fishing
8 groups could assert that status.

9 I think one advantage to having
10 the council play a more formal role in the
11 development of biological opinions is if they
12 have that role, then that takes some incentive
13 away from other fishing groups to try to
14 assert similar status in other fisheries.

15 Not to say that it'll ever happen,
16 but it could, based on that precedent.

17 MEMBER MORRIS: Who would like to
18 comment on that here in the room? Gina
19 doesn't want to comment? Keith?

20 CHAIR RIZZARDI: I just wanted to
21 know, from NOAA staff, do you think it's a bad
22 idea or a potentially controversial idea, to

1 actually overtly amend the regs to formalize
2 that and to allow the council to participate?

3 Assuming the statute allows it,
4 which I realize we got to make sure with OGC
5 that that's okay. But assuming it does, then
6 it's a regulatory issue.

7 It seems to me that it's a good
8 idea at first blush, but, I mean, I'm sure
9 there's a reason this hasn't happened to-date.

10 MS. SHULTZ: I actually wonder
11 what the benefit is. Because I'm looking at
12 the Tule Chinook; there was no applicant
13 status yet. There was information exchange
14 and understanding and buy-in without that. So
15 I'm trying to understand, is the review of the
16 -- and Bob said they did not share the BiOp,
17 nor would they be a proponent of doing so.

18 It seemed to me, from what I was
19 hearing for the three cases, was the opening
20 up, what information we're using, how we're
21 using it and having a clear understanding, a
22 dialogue on that, was more important than

1 actually reading the document and reviewing a
2 BiOp.

3 MR. LYNCH: This is Jim Lynch.
4 You know, one procedure reason why being an
5 applicant or an action agency is helpful is
6 that it cabins the discussion over the
7 development of the draft biological opinion to
8 the group of parties that are involved.

9 So by granting formal status,
10 either as an applicant or recognizing the
11 Agency as an action agency, they have a seat
12 at the table and you can differentiate those
13 parties from other interested parties and
14 ENGOs, et cetera.

15 So, you know, while we want to
16 have close interactions, I think we also want
17 to be able to have those interactions in a,
18 you know, candid way, without lots of other
19 parties at the table that may not necessarily
20 have the statutory authority or information
21 that we all do.

22 MR. BERNHART: Hey, Jim, this is

1 David Bernhart, I guess I want to ask you
2 about that last bit. So in the hypothetical
3 situation that the council is the applicant
4 and a draft biological opinion is shared with
5 them in the context of their statutory
6 authority for fishery management, how do you
7 cabin that?

8 I guess I don't think you do. I
9 think you have to have those conversations in
10 your usual public forum and involve and
11 integrate the input from the ENGO as well as
12 the fishermen, as well as staff, et cetera.

13 Or am I misunderstanding what you
14 were saying?

15 MR. LYNCH: Well, I think that
16 could certainly be a question. I think
17 something that, I think, the agencies have
18 struggled with is, when you provide a draft
19 document to an applicant, is that document
20 subject to release under the Freedom Of
21 Information Act?

22 And I think the Agency has taken

1 the position that it's not. I think relative
2 to the council, you know, certainly the
3 rule-making process that the council goes
4 through is subject to public disclosure and a
5 public process, development of biological
6 opinions is not subject to a public process in
7 the same way.

8 It's an internal agency process
9 and if the council is considered to be an
10 action agency, then, you know, intra-agency
11 privileges apply under FOIA and the documents
12 wouldn't be subject to release, necessarily.

13 Now, you know, the agencies that I
14 think have taken different positions on
15 sharing draft BiOps. In some cases, they just
16 decided they're going to share the draft with
17 everybody, and not just limit it to the action
18 agency or an applicant.

19 In other cases, they've decided
20 they want to keep those conversations internal
21 so that they can allow them to unfold and
22 avoid confusing the public while documents

1 develop.

2 So, you know, I think there are
3 some options in there, and what I would say
4 is, I don't know that this group wants to
5 constrain or, you know, dictate how those
6 processes would play out on a case-by-case
7 basis.

8 Because I think the council and
9 NMFS would want to be able to have those
10 conversations about what the right thing is to
11 do in a certain situation, other than just,
12 you know, waiving, creating a waiver problem
13 that you're always used to sharing drafts and
14 that's the way you're going to do it with the
15 public, right?

16 I mean, we'd have to be careful
17 about that kind of stuff. So I think the
18 answer to that is, if they're an action
19 agency, certainly they would work on that
20 internally, the Section 7 process is not a
21 public one, developing BiOps, even as an
22 applicant, that's true.

1 And that's the way it works
2 currently with HLA.

3 MEMBER MORRIS: So this seems like
4 a rich topic to keep talking about, the pros
5 and cons of this. So it's, I think --
6 Marian's making really ugly faces, though, so
7 what does she have to say?

8 MS. MACPHERSON: I don't see how a
9 council could discuss information
10 non-publically.

11 MR. WOLFORD: Yes, I think the
12 councils would have a really tough time with
13 that.

14 MR. LYNCH: Well, I guess we'd --
15 you'd need to review that question closer
16 because I got, you know, they turned it around
17 on NMFS and you had the NMFS avoid discussing
18 publically the elemental draft BiOp with, say,
19 a Bureau of Reclamation or some other federal
20 agency or action agency that's out there.

21 So, you know, I think there are
22 processes in place that allow for those

1 conversations to occur. They don't all need
2 to occur in public forums. Certainly the
3 regs, the implementation of it, would need to.
4 Perhaps that's a point that we flag for
5 further conversation or analysis here.

6 MR. BERNHART: So I'll take a shot
7 at that because I think there's a pretty brief
8 answer to that. When NMFS releases a draft
9 biological opinion to an action agency that
10 requests it, that is considered, you know, a
11 final document. It's not protected by any
12 pre-decisional privilege under FOIA and would
13 be released in a FOIA request.

14 We don't typically advertise them,
15 host them on the website, anything like that.
16 Although they might be visible in our internet
17 tracking system, but whatever.

18 And then what distribution the
19 action agency does with them is up to the
20 action agency. Some of them look at them and
21 send us comments and say, thank you very much.
22 And that's it.

1 Others like FERC, which themselves
2 have record filing requirements, et cetera,
3 our draft BiOps go right up on their public
4 record and comments are flooding in. So the
5 quick answer is yes, the draft BiOps, once
6 transmitted, are public and subject to FOIA.

7 MR. LYNCH: Well, and I think
8 that, you know, and if that's the case, that's
9 NMFS's position across all agencies, you know,
10 I think then, I don't think from the council,
11 at least the western pacific council's
12 standpoint, that's a problem. I mean, I think
13 the key is trying to be integrated into the
14 development of the final BiOp by reviewing
15 drafts. And if there are parties out there
16 requesting direct drafts, then they're
17 entitled to, I guess to see those, based on
18 your FOIA rule.

19 So I think the problem has been,
20 that we've seen in the past, is that the
21 development of those BiOps has just been kind
22 of an inconsistent approach. We do think that

1 we have lots of information to offer and we do
2 think we have special legal status, as Paul
3 said this morning, under Magnuson Act, that
4 just, given our role in the consultation.

5 So from a policy perspective, it
6 makes sense, and we think you have the
7 discretion to do it and we think it's going to
8 result in a better product. Now all those
9 things, I mean, we just need to understand, if
10 those documents are handed out, where will
11 they go?

12 And are we prepared to give those
13 things out? You know? That's a related
14 question, I guess.

15 MEMBER MORRIS: Okay, I'm looking
16 at the clock and we have to be out of the room
17 in 10 minutes, so I want to shift the
18 discussion to next steps. But Columbus, you
19 had a comment you wanted to make before we
20 shifted to next steps?

21 MEMBER BROWN: I'll just be brief.
22 I think that there are a lot of differences

1 that I've heard from place to place and I
2 think we have to be very careful about how we
3 approach our approaches in that we don't tie
4 our hands unnecessarily in some areas.

5 But at the same time, not be too
6 loosey-goosey. What I did here was, each of
7 those scenarios was based upon the local
8 environment that they were working in.

9 You know, dealing with the Native
10 Americans and their tribal issues are other
11 statutory responsibilities that have to be
12 dealt with. So that makes that case different
13 than the case down in the Gulf of Mexico.

14 But I do know that if this meeting
15 were, NOAA staff decided tomorrow they needed
16 to go and meet with the Fish and Wildlife
17 Service to further discuss this issue, who
18 jointly share the responsibility of
19 administering the Endangered Species Act, they
20 don't have to put it in a public notice to do
21 it.

22 They just pick up the phone and do

1 it.

2 MEMBER MORRIS: Thanks, Columbus.
3 So back to the, what's the, the Terms of
4 Reference, is that what it's called? It's a
5 great NOAA acronym that I haven't quite
6 mastered yet. This working group has a year,
7 we've been constituted for one year, to come
8 up with findings and recommendations and
9 submit them to the NOAA fisheries Assistant
10 Administrator.

11 There's a possibility to extend
12 our term of everybody thinks it's necessary,
13 but we're aiming to have a set of findings and
14 recommendations sooner than a year from now.
15 So with that in mind, I think the idea has
16 been floated that we might have a follow-up
17 working group virtual session perhaps in
18 January.

19 And the next step prior to that
20 seems like it would be some kind of
21 compilation and organizing of the best
22 practices and areas of improvements that came

1 out of today's discussion and then circulating
2 that so that people could make it a better,
3 more polished list, include items that haven't
4 come up in our conversation, but are important
5 things that we should address.

6 Not have it be exhaustive, but
7 have it be focused in some way. And then to
8 have another conversation in January about how
9 to move from that initial kind of brainstormed
10 list into a series of findings or
11 recommendations, which are the things that we
12 could all agree on pretty easily and which are
13 the things that are going to take more
14 conversation and more background in order to
15 be able to talk about them in an understanding
16 way.

17 Does that sound like a workable
18 task for the, between now and January? The
19 meeting in January would be to kind of sort
20 things into, these seem like pretty good ideas
21 to everyone, that we could develop further,
22 and these are things that are contentious or

1 problematic that we need to talk more about,
2 and dig in more deeply on.

3 Does that sound workable? Anybody
4 have any suggestions in addition to that
5 between now and January? And Mark, we'd be
6 happy to hear from you as well.

7 DR. HOLLIDAY: Thanks, Julie. So
8 this is a joint work, the fishery service,
9 MAFAC members and the councils, and so there
10 are a couple of other venues that will be
11 upcoming. The Council Coordination Committee
12 is going to be in January, we have a Managing
13 our Nation's Fisheries conference in May of
14 next year.

15 So I know budgets are tight for
16 travel, and but I think we should use these
17 windows of opportunity where, at least if
18 there's a critical mass of people together
19 from MAFAC, the Agency and the councils to get
20 together to help continue progress on these
21 things.

22 And we can try to map out some of

1 those opportunities for people. The terms of
2 reference that Julie talks about, these were
3 sent out to the council chairs and Emily
4 Menashes's request for membership on this back
5 in October.

6 But we'll be using, we can use the
7 MAFAC Website to post documents, both the
8 PowerPoints that we saw today and any other
9 documents and reference materials to ensure
10 that all the members of the working group have
11 a place to exchange information and provide
12 that support for the working group.

13 So I think your strategy of trying
14 to come up with a work plan on how to move
15 forward is a good one and we'll try to
16 facilitate that by providing the support for
17 all the members on the working group to
18 participate as best we can, whether it's other
19 teleconferences, we will be glad to help
20 organize them.

21 Subsequent webinars, other experts
22 that you want to bring to the table, you can

1 use our office to help facilitate providing,
2 getting those people and those resources to
3 the project.

4 MEMBER MORRIS: Thank you, Mark.
5 Now were you sort of raising the possibility
6 that the CCC meeting in January could be a
7 time when there was a kind of split webinar
8 like this with some people in the room and
9 some people from distance?

10 DR. HOLLIDAY: I'm just
11 suggesting, not, you know, specifically, any
12 one particular meeting, but that's an example
13 of a meeting where there will be a number of
14 people who are on the work group in one place
15 that might be a convenient way to get together
16 versus, I think it's better to have a few
17 people face-to-face and bring other people in
18 by phone rather than try to conduct this
19 entirely by teleconference.

20 So I'm just suggesting let's be
21 creative and innovative in trying to do that
22 and we'll help you identify what some of those

1 opportunities might be.

2 MEMBER MORRIS: Okay, so we'll
3 look into that as a sort of time goal for the
4 January meeting, see if we can have it be
5 somehow around the CCC meeting so at least the
6 CCC members might be able to be there in
7 person and the rest of us --

8 MR. WOLFORD: I think that's a
9 great idea. Except that the CCC meeting will
10 not be in January, it will be in February.

11 DR. HOLLIDAY: Yes, until last
12 Friday, the people were still talking about it
13 as in January, but we decided as a group on,
14 last Friday it was February.

15 MR. WOLFORD: Yes, it's in
16 February.

17 MEMBER MORRIS: Okay. Well, thank
18 you all.

19 MR. LYNCH: Hey, another --

20 MEMBER MORRIS: Yes?

21 MR. LYNCH: I'm sorry, this is Jim
22 Lynch. I was just going to offer, based on

1 the council's experience in the Pacific on
2 some of these issues, that it may offer to
3 produce a proposal or white paper, sort of
4 fleshing out some of the issues that we
5 raised, if parties would find that helpful in
6 advance of the January meeting.

7 So in addition to summarizing some
8 of the issues we discussed here, I think it
9 would be possible to produce a short white
10 paper proposing some of these options and
11 maybe identifying some pros and cons for this
12 group to consider in January.

13 MEMBER MORRIS: So we're talking
14 about that here a bit at the table. And Gina
15 had a comment?

16 MS. SHULTZ: Well, I was thinking
17 that the working group should be the one that
18 takes the information we got today and pull
19 that together and come up with some
20 recommendations and we have the councils, are
21 part of that working group, and so they will
22 be a part of, you know, putting that together.

1 But I don't think we should, yet,
2 start taking additional white papers and
3 information. Maybe after we get the next
4 step, after our next meeting, after we pull
5 the lessons learned and sort of identify some
6 recommendations.

7 And as we're fleshing that out,
8 that's where we might want to seek some more
9 information from the parties we heard from
10 today or even others we haven't yet.

11 MEMBER MORRIS: So Jim, we will, I
12 guess I'll take leadership with MAFAC staff on
13 pulling together this first draft of a list of
14 issues that came, practices and issues that
15 came out of today's. And please, you and Ed
16 should both comment on that and if you feel
17 like we haven't captured on that draft list,
18 everybody should comment on that draft list
19 and try to make it as representative of our
20 opinions as possible.

21 So I wouldn't put a lot of your
22 personal energy into writing a white paper

1 right now. Please focus on this kind of
2 summary of the meeting document that we'll be
3 sending out for you to review, and let's work
4 on that collaboratively before we spin into
5 more deeply thought-through white papers. Is
6 that okay?

7 MR. LYNCH: Okay.

8 MEMBER MORRIS: Great.

9 CHAIR RIZZARDI: Should we get
10 agenda for the Chairman question on for
11 tomorrow?

12 MEMBER MORRIS: Yes, we had an
13 agenda time tomorrow scheduled at 8:30 to 9:30
14 to work on this some more. So the question
15 for the working group is, do we want to try to
16 get together tomorrow at 8:30?

17 Do you feel like we've made enough
18 progress today that we don't need to reconvene
19 in the morning? Is it complete? Or do you
20 want to talk more in the morning? Dave?
21 David?

22 MR. BERNHART: I am at your

1 disposal from St. Pete, so if there is other
2 interest, I'm ready and able.

3 DR. HOLLIDAY: Just an
4 intervention for, the part on the MAFAC agenda
5 was to make sure that there was sufficient
6 time for the work group to be able to report
7 out back to MAFAC on, the full committee on,
8 what your next steps are.

9 And if you feel comfortable that
10 it wasn't to provide any more value added to
11 the process of the work group, but to be
12 prepared to come back to MAFAC for the report
13 out session later that afternoon about what
14 the next step would be, so.

15 But we have a room, we have time,
16 but it's unlikely we'll get people from Hawaii
17 to come by. That wasn't the intent to have
18 people, you know, get up at 4:00 in the
19 morning to participate in a call.

20 MEMBER MORRIS: Well, I will be
21 here at 8:30 in the morning trying to polish
22 some of what we talked today into a

1 presentation for MAFAC tomorrow afternoon.

2 And you're welcome to join me, but you're not
3 expected to be here if you have other things
4 you need to do in other places.

5 Great. So can we, then adjourn?

6 Thank you, everybody.

7 (Whereupon, the above-entitled
8 matter went off the record at 5:16 p.m.)

9

10

11

12

13

14

15

16

17

18

19

20

21

22

A				
abide 56:2 78:7	accessible 269:3	120:21 121:4,13	218:12 252:17	308:19
abiding 6:20	accomplish 84:19	125:5,6 127:14,19	275:9	ADMINISTRAT...
ability 13:8 14:11	251:17	128:18 129:5,22	Act's 118:17	1:1
38:5 78:3 121:14	accomplishes 13:11	134:15 135:5	ad 3:3 6:14 7:3,22	Administrative
134:4 136:18	account 170:4	137:11,15 139:1	12:1 33:9 76:12	125:19,21
250:9 287:20	accounted 15:17	139:21 144:6,20	247:16 284:11,21	administrator 3:15
able 13:20 52:22	accounting 59:19	145:19 154:4,6	add 59:21 62:4,7	3:22 4:13 26:7
93:17 102:19	accuracy 168:5	158:10 159:14	105:16 134:13	78:5 141:15 189:7
103:6 104:10	accurately 226:6	160:6,6,9,15	143:7 185:19	196:21 233:1
106:12 128:22	achieve 240:22	163:10 165:22	191:11 264:16	273:5 279:13
150:10 158:16,17	241:2 283:9	166:3 170:19	275:1 276:17	309:10
162:8 172:21	achieved 80:21	175:14 178:8	286:9	administrators
174:19,19 181:14	96:5	182:21 189:8	added 63:13 97:11	277:10
217:1 251:7,13	achieving 87:2	190:1,5,16,18,19	269:9 318:10	admission 19:3
266:8,14,19 267:6	acidification 60:11	191:12 192:20	adding 28:14 81:20	adopt 156:19
269:10 295:18	62:1,9 63:4 64:11	193:9 194:19,20	addition 23:21	159:10 253:4
300:17 303:9	64:18 65:8 67:21	194:22 195:1	33:14 61:13	254:10
310:15 314:6	69:22 70:12 72:15	199:11 205:20	122:17 226:14	adopted 180:4
318:2,6	103:10,13	209:11 210:18	233:4 311:4 315:7	266:22
above-entitled	acknowledge 142:7	211:6 213:13	additional 76:16	adoption 252:18
232:1 319:7	175:20	216:3 220:18	104:19 164:7,12	adult 202:14,21
absent 188:18	acknowledged	221:21 222:17	175:13 197:17	205:12 219:15
absolute 61:21 64:9	142:9 165:1	224:20 254:14,15	206:14 211:1	229:12
97:17 161:16	183:11	265:16,17 266:22	217:11 274:7	advance 255:2
absolutely 27:21	ACLs 6:6	270:11 284:8	316:2	264:11 266:14
63:2 139:2 254:17	acronym 144:19	285:14 286:12,17	Additionally 165:7	289:6 315:6
absolutes 61:17	309:5	287:14 288:5	additions 8:13	advanced 237:14
64:17 66:10	acronyms 197:18	290:21 291:4,10	75:14	advancement
abundance 17:12	act 42:18 54:19	291:12,20 297:9	address 17:18	81:15
160:17 165:3	73:7 78:19 115:10	300:5,11 302:10	33:21 34:5 40:13	advantage 32:16
241:16 242:22	115:11 118:5,6	302:17 303:18	47:2 61:3 62:18	196:17 298:9
243:6,18,19	119:3,10 120:5,10	304:20 305:9,19	80:20 177:2 206:8	adverse 133:8
245:15,17,19,21	120:14 121:9	305:20	207:6 213:21	137:17
246:9 247:19	123:15,20 124:17	actions 114:11	217:15 220:6	adversely 120:8
259:3	125:15,19,21	116:18 118:13	227:5 270:4,10	125:8 131:8,11
abundances 253:22	126:13 134:8	121:20 124:11,11	310:5	137:13
abundance-based	168:8 178:9 179:5	130:17 131:5,8	addressed 17:16	advertise 305:14
243:16 245:11	185:3 190:5 194:4	139:6 176:19	21:1 161:2,6	advice 158:19
Academy 71:12	194:8,14 211:14	265:1,3 271:13	270:13 274:19	189:6 198:1,9
accept 131:1	220:21 234:16	272:7 281:20	addresses 17:6	221:5
acceptance 251:22	236:14 268:4	active 16:14	18:2 24:21 35:12	advisor 258:18
accepted 75:11	301:21 307:3	activities 129:14,15	100:22 237:21	advisors 251:12
219:21	308:19	286:13	addressing 177:13	advisory 1:4,6,12
access 14:22 16:7	acting 113:18	actual 73:18 74:20	197:10	108:5 249:18
16:22 35:18 36:9	280:21	84:4 118:16	adequately 186:22	251:9 252:9,15
36:14,15 260:7	action 114:14,15	139:14 146:20	adjourn 319:5	257:11,16
	118:4,5,16 120:14	200:22 217:8	administering	advocate 266:11

affect 68:7 131:8 258:21	49:8 130:21	164:14	12:22 13:15,21 14:5,9,13,17 19:10 21:15 22:1 24:14 28:3 35:10 46:2 68:4 71:6 97:13	215:20
afford 43:18	agree 33:2 49:21 50:13 51:18 52:17	alright 229:6	19:10 21:15 22:1 24:14 28:3 35:10 46:2 68:4 71:6 97:13	answer 130:9 164:13 182:16,18 186:8 226:21 262:21 268:19 276:15 285:7 303:18 305:8 306:5
afternoon 53:3 108:4,22 116:14 141:13 143:11 318:13 319:1	58:17 63:15 64:6 68:5,11 87:6 189:11 228:8 265:12 288:20 310:12	alter 270:1	amount 9:4 27:9 36:8 164:1 223:10 240:12	answered 189:2 244:5
age 69:7 226:16	agreed 34:11 78:5 86:18 250:14 294:10	alternate 34:2 96:8 281:8	amounts 36:1 41:17 216:19	answers 212:21
agencies 127:15 129:6 131:20 135:1 165:22 248:22 285:1 286:12,17 288:5 301:17 302:13 306:9	agreeing 181:10	alternative 8:11 34:4,21 38:13,16 40:1 47:10,15 66:1 87:5 178:1 178:10 185:10 199:19 209:1,22	anadromous 234:3	ANTHONY 1:22
agency 74:3 87:10 104:8 114:14 118:16 119:6 125:3 126:7 127:20 129:22 130:16 144:5,7,20 145:9,19 161:22 164:20 166:3 167:9,14,19 169:10 175:14 178:8 179:17 185:1 190:18 191:12,16 192:21 194:19 195:1,2 221:21 222:17 228:1 284:8 287:15 290:21 291:4,11,12,20 297:9,13 300:5,11 300:11 301:22 302:8,10,18 303:19 304:20,20 305:9,19,20 311:19	agreement 9:3 153:14 167:5	alternatively 286:14	analyses 132:22 139:6 208:22	anthropogenic 219:2
agency's 182:20 297:1	agreements 203:9	alternatives 118:12 128:2 165:18 172:8 220:3,18 254:8 262:16 286:11 287:5	analysis 49:17 118:11 130:2 152:17 158:2,7,16 159:3 162:21 173:3 177:4,9,17 185:11 205:17 210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	anticipated 210:5
agenda 9:12 55:7 58:6 159:19,21 317:10,13 318:4	agrees 71:20	altogether 150:3	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	anticipating 65:18
agendas 100:15	aground 68:18	amend 28:5 299:1	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	anxiety 256:16
agent 173:8	ahead 85:7 143:6 186:7 196:3 217:10 257:1,17 262:3 283:19	amended 127:12	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	anybody 12:16 30:21 32:10 47:9 48:11 49:13 51:16 63:22 76:5,20 109:16 110:7 117:7 125:11 185:19 274:17 288:3 311:3
ago 7:6,6 25:14	Aid 40:18	amendment 67:7 80:6 150:21 151:4 151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	anybody's 24:5 116:4
	aiming 309:13	80:6 150:21 151:4 151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	anytime 65:6 232:20 241:13
	Alabama 280:10	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	anyway 24:7
	Alan 2:17 273:5,6	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	anyways 216:6
	Alan's 273:6	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	apparently 94:2 282:22
	alarm 88:12 205:8	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	appear 265:7
	alarmed 215:11	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	appendices 11:18 12:3 47:21 59:7 60:4
	alarming 70:2,10	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	appendix 11:14 12:6 29:21 30:5 32:6,21 47:17
	Alaska 1:19 50:2 110:11 126:9 128:12 235:11 259:11,18 260:14	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	Applause 106:18
	ALEXIS 2:10	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	applicable 119:18 129:7 197:16
	allocated 223:11	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	applicant 130:1 145:15,17 157:15 166:1,4 175:11,21 176:5 178:10
	allocation 33:15 37:16 39:2 50:2 51:3 214:16 224:5	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	
	allow 50:14 55:7 74:14 80:17 179:7 180:4 259:20 299:2 302:21 304:22	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	
	allowed 37:14	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	
	allowing 288:14	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	
	allows 39:1 299:3	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	
	alluded 151:7	151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	
		151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	
		151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	
		151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	
		151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	
		151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10 159:4,8 160:6 166:21 167:2 168:7,9,11 168:17 172:7 188:13 189:12 191:18 192:21 193:2,6,20 194:3 197:8 198:1,3 199:4,16 201:17 204:15 206:10 210:19 211:1,7,17 211:18 212:5 216:4,11 217:2,8 221:8 285:17	210:11 218:3 224:8 229:18 239:15 246:21 249:21 250:8 252:12 269:8 274:17 305:5	
		151:13,15 152:1 152:14 153:3,5 154:6,10,12,15 155:2,11 156:8 157:10		

179:16,17 184:21 185:2,4,5,13,17 185:20 187:2 286:14 287:15 289:11 292:4 296:5,8,11,12 297:2,6,14,17,18 299:12 300:5,10 301:3,19 302:18 303:22 applicants 129:6 178:20 184:17 185:2,6,8 288:5 289:22 298:4 Applicant's 176:1 application 224:6 applied 125:20 172:16 184:9 246:17 295:20 applies 124:6,14 apply 130:12,16 137:7 242:3 243:4 243:14 244:3 302:11 applying 184:18 appreciate 62:20 256:22 278:14 appreciated 76:1 approach 137:22 172:19 174:1 224:7 228:12 238:12 239:5 241:17 243:3,15 245:11 267:4 294:5 306:22 308:3 approaches 127:6 209:1 283:21 285:5 308:3 approaching 208:21 appropriate 7:13 34:13 36:6 49:20 63:20 92:4 102:7 136:5 187:4 193:4 appropriately 54:21	appropriations 126:18 approval 119:14 217:8 297:8 approve 119:10,11 156:18 189:8 approved 7:5 79:14 80:6 119:8 216:11 277:10 approximately 17:10 April 206:12 254:10,15,17,18 254:18 266:21 aquaculture 2:2 6:7 75:6 76:10,13 77:18 78:3,15 80:4 84:13,20 85:19 86:2,8,9 88:4 89:21 91:21 92:2 93:4,6 94:9 95:16,18 96:18 98:18 99:22 103:21 arbitrary 125:20 area 7:8,9,13 8:8 9:4 14:19 16:8,16 17:8 19:1,22 60:10 104:2 128:18 133:22 134:11,18 138:13 138:16,19 139:9 140:4 202:11,12 202:13,17 208:1 209:14 211:16 298:2 areas 7:14 8:3,5,7 8:21 46:4 60:9,14 78:12 113:2 187:8 219:17 261:19 275:19,21 281:18 282:12 308:4 309:22 arena 176:19 266:12 argued 131:21 argument 67:12	132:4 230:9 arguments 209:1 256:1 arises 225:9 arm-twister 228:4 arrive 171:9 arrived 250:12 arriving 214:22 article 63:6 articulate 129:1 articulated 27:1 articulating 129:3 articulation 135:14 aside 27:19,20 asked 78:2 127:5 154:17 156:17,22 159:14,16 164:6 168:15 188:21 189:7 233:11 247:17 262:14 269:18 270:10 asking 82:8 116:21 130:22 131:14 132:18 243:3 269:21 294:19 aspects 181:7 assent 48:16 assert 298:8,14 assess 182:20 267:7 assessing 128:8 170:15 assessment 77:19 127:10 145:5 207:1 208:8 212:11 217:22 218:2,15,22 220:16 224:10 assessments 136:20 215:9,13 216:18 219:6 225:14 226:1,19 asset's 39:8 assign 11:8 assistance 92:3 93:3,7 assistant 3:15,21 4:12 141:14	196:20 232:22 279:12 309:9 assisted 113:20 associated 21:9,21 22:6 67:10 127:3 239:10 253:2 Associates 2:4 Association 2:1,4 145:16 157:15 166:2 175:22 185:6 186:18 296:5,16 assume 137:21 140:5 assuming 77:7 123:13 187:16 299:3,5 assurance 275:4 Asuka 109:19 Atlanta 280:3 Atlantic 53:16 111:15 126:10 132:3,10 150:7 174:17 205:4 223:20 224:16 229:22 ATMOSPHERIC 1:1 Atta 3:15 109:12 109:13 140:17 141:5,6,9,12,14 143:20 160:22 175:2 182:18,19 184:20 186:7 188:2,10 192:9,10 192:13,15 198:6 276:16,17 attached 36:4 46:6 attempt 34:4 44:13 46:12 126:16 attempting 26:1 152:4 attempts 127:21 attend 172:11 attention 232:6 attentively 231:22 attorneys 115:19	attributes 239:15 audience 26:4,6 Audio 280:12 August 152:20 209:7,10 Augustine 1:23 Australian 37:22 authorities 124:16 authority 77:6 78:17 79:1,9,11 80:1,10,16 84:7 124:8 194:13 206:8 211:13,20 213:20 214:10,12 300:20 301:6 authorized 199:9 200:20 205:19 206:3 auto 258:12 automatically 37:18 119:8 availability 138:17 169:16 available 16:15 46:10 94:8 135:18 145:11 161:9 162:4 163:1 164:16,18,19 177:1,15 179:2 181:21 183:14 187:2 215:14 216:22 218:6,21 220:5 221:8 254:4 264:4 267:18,19 295:12,13 average 151:12 avoid 152:5 219:12 221:1 302:22 304:17 avoidance 124:12 avoided 221:10 aware 17:14 43:3 122:3 133:14 198:4 A-F-T-E-R-N-O-... 108:1 a.m 1:14 5:2
--	---	--	---	---

B				
back 24:9 31:10 42:14 52:12 53:3 54:7 55:16,16 58:15 63:13 64:20 65:16,21 73:14 80:14 83:8 87:20 91:2,6,8 95:16 96:21 97:1 98:10 102:18 106:21 107:5 128:14 134:6 153:12 166:7 167:13 174:22 178:20 216:14 219:14 222:12,19,19 231:21 239:8 244:2,9,18 245:13 247:12,14,15 249:11,15 256:4 279:2 281:10 289:2 290:4 292:9 292:12 296:19 297:13 309:3 312:4 318:7,12	274:10 based 5:19 40:17 40:20 54:5 59:13 63:18 69:2 104:5 117:1 130:3,9 131:2 132:1 135:17 141:20 145:14 151:17 158:22 162:7 165:2 171:4 173:16 201:3 237:6 239:12 241:17 243:6 264:8 268:13 294:9 298:16 306:17 308:7 314:22 baseline 129:9 257:12 baselines 163:9 bases 217:20 basic 28:2 181:7 220:8 245:22 basically 15:12 16:20 20:5,20 35:18 37:20 38:13 78:6 118:3 121:10 147:2 205:17 238:19 239:1,7 242:1,13 255:7 268:12 Basin 234:6 basis 20:4 43:14 119:15 162:17 205:18 217:6 227:15 286:16 291:4 297:12 303:7 bat 41:5 battle 230:17 231:8 Bay 17:11 beach 43:5 170:1 258:7,11 259:2 beaches 202:16 beam 27:11 Beamesderfer 248:14 249:21	251:10 269:4 becoming 239:13 287:14 beg 160:2 began 146:6,13 174:10 beginning 11:1 41:4 130:11 175:7 191:13 216:3 begins 128:6 130:18 belief 265:14 believe 33:10 39:3 39:18 65:10 66:7 77:18 78:17 81:15 82:13 85:17 192:17 193:13,14 194:19 249:13 296:18 298:1 believes 286:15 bells 88:12 205:9 beluga 132:14,15 beneficial 176:17 benefit 7:1 245:3 265:21 299:11 benefits 95:18 Bennett 125:17 Bernhart 2:11 3:21 112:7 195:20 196:1,4 207:18,21 223:15 225:15 227:17 229:2 230:19 279:10,10 285:15 300:22 301:1 305:6 317:22 best 27:6 33:20 54:21 112:20,22 113:14 135:17 162:22 164:16 177:1,15 180:14 181:21 184:22 187:7 218:21 221:3,5 261:19 263:15 264:4 267:17,18,19 268:17 274:10	281:17 282:12 283:18 295:11,13 309:21 312:18 better 21:16 73:20 97:20 113:7,15 115:6 120:2 142:13 168:21 179:10 181:5,12 181:20 191:9 195:1 199:22 214:21 222:14 239:5 255:21 268:19 282:13 292:20 307:8 310:2 313:16 beyond 92:15 165:7 167:16 250:19 251:17 bi 157:11 big 6:6 11:15 26:11 26:21 39:14 45:7 45:20 50:1 67:2 67:18 104:8 119:20 207:5 228:11 231:10 266:11 292:15 293:3 bigger 184:10 245:15 292:7 biggest 135:2 235:8 Bill 55:4 191:13,21 billion 99:1 bin 187:11 biological 114:10 136:15 143:17 145:12 149:9,20 150:1 151:16 152:11 153:1,8 154:2,13 155:10 155:13 157:8 158:15 159:2,7 162:18 163:2,13 164:3 168:13 169:18,22 171:7 172:4 173:4,13 174:8 176:10,14 178:14,18 180:16	183:22 184:21 185:15 187:4 189:4 193:22 194:12 200:19 201:2,14 203:5 205:21 206:2,18 210:20 212:4 214:5 215:1 221:4 224:12 238:15,17 239:10,12 253:9 253:17 254:16,19 263:3,9 264:22 265:18 266:9,17 267:1 270:2,5,17 270:22 273:13,21 275:9 276:4,5 277:5 282:1 287:3 288:8,15,21 295:6 295:11 296:17 297:19 298:11 300:7 301:4 302:5 305:9 biologist 3:10 113:21 143:14 biologists 127:14 274:14 biology 130:3 BiOp 165:1 166:19 167:3,13 168:16 168:21 169:3 172:18 174:3 188:13,19 190:11 213:14 219:14 297:2,12 299:16 300:2 304:18 306:14 BiOps 168:2 171:12 173:20 176:4 272:14 275:13,17 294:21 302:15 303:21 306:3,5,21 biotic 138:18 birth 226:15 bit 7:2,7 25:9 44:5 60:18 63:8 146:1 154:14 157:17

193:15 196:7 206:20 209:5 212:12 218:5 222:14 225:16 226:2 244:18 247:13 262:7 277:20 287:11,21 301:2 315:14	boost 245:15 borders 10:14 bottom 36:7 60:6 82:2 99:15 120:19 147:15 169:5 170:16 179:3 198:21 199:2,4 200:5,6,16 202:6 202:20 204:4 206:15 210:4,7 220:6 223:22 234:21 235:2 236:22 237:8 258:2 bought 56:12 294:3 box 224:10 228:21 228:22 239:20 261:1 boxes 127:17 129:18 brainstormed 310:9 Branch 140:20 brand 201:19,20 break 102:21 128:8 130:6 222:8,9 231:15,21 278:5 breakpoints 246:12 breakup 230:22 bridge 291:6 brief 114:4 159:21 168:22 189:7 305:7 307:21 briefings 157:5 briefly 68:4 71:6 79:4 123:12 brig 244:21 bring 134:4 206:14 285:11 312:22 313:17 bringing 168:11 broaden 17:19 broadly-worded 297:10 broken 130:7 brought 8:8 25:18 25:18 149:18	185:8 193:16,19 252:10 269:9 270:7 Brown 1:21 52:10 98:9,17,20 112:4 280:1,1 307:21 brutal 50:4 BRYANT 2:12 budget 5:6 7:10 99:4 budgets 311:15 build 25:10 126:4 273:21 building 1:13 72:11 257:3 built 33:16 34:19 42:6 bulk 234:9 bullet 33:8 40:19 48:12 53:10 57:7 57:13,14 58:19 77:5 82:6 83:11 84:2 85:1 87:7,7,8 87:9,19,21 90:20 90:22 91:2,3,5,10 91:12 92:11,13 96:1,14 97:5,8,11 97:14 98:2,4 99:12,18,19 100:6 100:9 104:19 170:13 206:19 211:2 bullets 40:11 47:16 83:20 87:6 88:1 89:4 92:7 95:22 104:18 bump 117:17 bunch 82:14 233:18 244:4 295:4 BUNSICK 2:12 buoys 146:9 burden 137:9 Bureau 304:19 business 14:19 20:6 42:20,21 68:14 231:13	businessmen 19:21 buy 36:3 43:1 46:13 259:3 buyout 44:8 buy-in 294:6 299:14 buy-ups 113:4 buzz 125:1 bycatch 161:17 162:1,11 165:8 197:10 199:6 200:16 201:1 203:16,20,21 204:3 206:9 208:18,19 209:14 210:6 220:19,22 bycaught 202:20 by-catch 24:8	262:1,4 280:13 Canada 235:8 236:4 258:3 259:11,19,20 Canadian 14:22 15:1 candid 300:18 cap 151:9,20 152:15 163:22 167:11 capability 80:3 capacity 134:20 138:15 Cape 233:14 234:19,20 235:12 235:20,22 capricious 125:20 caps 150:13,14 152:19 153:11 154:20,22 156:20 159:15 160:7 189:10 193:21 capture 218:16 captured 128:5 162:11 218:9 316:17 care 32:17 career 69:6 careful 303:16 308:2 carried 180:18 282:3 carrying 134:20 138:15 carving 10:14 case 3:13,14,20 4:10 12:22 29:14 53:15 93:14 108:13,14 116:12 125:3,16,17 138:7 140:9 141:19 145:13,13 180:11 183:5 184:19 188:7 192:7 195:18 197:4 201:9 207:4 214:7 221:3 228:14
			C	
			C 2:2 cabin 301:7 cabins 300:6 calculate 162:10,14 163:18 calculated 162:12 calibrating 123:17 California 2:1 279:19 call 62:13 148:19 194:10 205:16 216:17 242:4 255:7 290:22 318:19 called 27:19 140:11 146:10 172:15 173:5 238:12 242:19 247:16 249:5,17 309:4 calling 74:2 186:15 242:2 calls 33:20 76:12 102:7 234:19 237:20 274:10 277:4 Campbell 110:9,10 112:13 261:22	

231:22 232:8 239:2 240:15,19 254:14 266:15 268:19 278:12 281:16 282:7,21 284:10 291:9 297:5 306:8 308:12,13 cases 130:5 132:2 225:8 242:8 275:13 299:19 302:15,19 case-by-case 284:18 303:6 catastrophic 66:12 66:13 242:16 catch 6:6 13:1,5 14:6,18 17:14 18:9,16,18 20:11 21:6,13,19 22:3 24:6,18 25:13,13 26:14 29:3,4 33:7 34:1 37:12 38:22 40:3,5,21 41:3,9 42:11 45:13 46:22 48:4,5,7 52:12 55:21 70:19 149:19 160:19 236:9 258:13 259:21 296:4 catches 235:18 category 58:14 60:8 250:7 Cates 1:22,22 22:8 31:7,11,17 51:18 55:2 56:17 63:15 68:13 77:22 85:4 85:10,13 88:2 92:10,14,18,22 96:13,19 97:1 228:18 230:5 231:4 caught 53:11 54:6 56:5,6 59:14,15 149:3 162:15 235:3,6,10,21 cause 121:20 213:7	caused 17:7 18:3 causes 256:8 260:6 causing 230:21 caution 23:3 cautious 27:7 cautiously 23:17 CCC 112:9 183:11 183:18 313:6 314:5,6,9 center 1:19 86:11 136:11 151:18 152:18 167:1 172:14 183:1 200:15 201:10 203:14 206:13,21 207:10 208:7 212:14 217:14 222:1 225:17 248:1,3 Centers 188:3 225:19 central 160:9 197:9 197:12 cents 29:10 certain 38:1,2 68:6 71:8 129:19 185:7 282:22 303:11 certainly 53:16 71:19 179:6 204:21 205:22 208:22 214:12 215:10 221:16 227:4 252:5 274:20 281:7 288:20 293:6 298:7 301:16 302:2 303:19 305:2 Certification 5:9 cetera 25:2 100:11 252:9 300:14 301:12 306:2 chain 277:1 chair 1:14,18 3:3 3:23 5:3 21:3,18 22:3 26:16 44:18 45:6 51:22 52:18	52:20 61:7 64:2,8 64:20 72:21 75:3 75:7,10 86:22 95:14 99:11,17 100:4 104:1 105:17 106:20 107:1 180:20 222:10 232:19 248:3 272:9 276:3 291:16 298:20 317:9 Chairman 100:14 110:18 111:8 317:10 chairs 222:6 312:3 challenge 72:6 296:16 challenged 296:19 297:3 challenges 117:18 131:19 189:18 262:12 challenging 71:8 262:18 chance 109:3 110:5 111:18 change 8:16 23:4 39:2 43:21 60:7 63:1 65:8 66:7,12 92:17 95:11 98:13 99:5 100:17 119:11 121:14 137:3 162:16 192:1 194:1 264:3 284:5 286:10,11 changed 6:3 7:6 30:5 47:19 118:14 155:19 167:11 191:14 changes 8:12 9:15 11:11 18:22 23:14 43:11 60:17 64:21 75:14 76:5 77:3 83:1 101:6 105:7 180:2,3 294:11 changing 6:5 21:10 21:22 22:7 60:12	101:1 characteristics 163:7 characterize 292:2 chart 120:19 235:5 235:19 charter 56:5 charts 238:5 260:6 Chatwin 1:22 30:15 39:22 66:16 73:11 75:17 76:2 83:9,16,22 94:6 98:1 101:14,17 138:9,20 139:3 182:6,7 187:9,10 225:3 CHAVES 2:13 check 99:12 115:16 116:6 checklist 244:9 293:14 chemical 138:18 cherry 37:13 chief 140:20 188:13 279:16 chime 232:20 Chinook 4:11 232:7 234:6 235:1 235:6,21 236:1,2 236:8,11,21,22 237:5,13 238:6 242:3 246:14 247:19 250:10 299:12 chooses 178:12 choosing 90:6 chronology 201:5 Chuck 4:17 110:21 111:2 232:12,18 241:13 248:12 257:2 259:8 262:20 268:19 269:17 chunk 235:9 circle 150:9 174:17 circulating 310:1 circumstance	136:21 224:3 circumstances 157:4 227:3 228:15 citations 9:22 Civic 1:13 231:11 claims 65:15 Clampitt 1:23 24:1 25:5 28:13,17 32:7 33:12 41:2 47:5 49:14 61:15 62:19 64:6,15 65:1 66:6 91:11 91:18 94:2 112:5 280:4,5 296:3 clarification 28:8 54:13 57:22 77:16 83:10 96:2,5 194:15 clarifications 103:4 clarified 81:3 clarify 61:5 80:9 81:10 82:5 97:7 clarifying 143:22 clarity 53:8 58:16 60:18 127:2,7,18 293:11 classical 173:5 clause 21:6 clean 9:15 73:6 102:17 105:6,9 106:10 clear 56:16 71:16 135:4,14,15 170:17 172:6,12 208:14,20 214:8 240:21 241:1 262:16 278:17 283:6,7 299:21 clearer 130:7 179:12 clearly 52:13 278:16 climate 6:7 60:7 65:8 66:7,12 100:17 137:3 158:22 162:16,17
---	--	--	--	--

165:4 173:2,6 183:6 clinical 268:9 clock 121:1 135:9 307:16 close 121:4 135:21 146:22 147:10 156:7 174:10 178:2 192:22 277:15 300:16 closely 154:10 167:1 closer 181:22 304:15 closing 126:15 150:2 192:11 208:1 closure 147:9 151:12 174:6 209:14 211:17 closures 211:18 Club 231:11 coast 2:3 19:19 46:8 224:2 225:19 226:10 235:6 260:13 coastal 15:3 16:16 16:21 20:3,4 35:17 36:16 81:18 90:2 coastline 234:22 cod 16:2 171:21 code 133:9 166:17 codfish 36:20,21 codified 125:18 127:11,13 166:17 coin 269:20 collaboration 115:8 142:6 177:15 226:11 276:19 collaborative 227:22 collaboratively 317:4 collapse 14:22 17:7 collapsed 16:5	colleagues 196:15 collected 268:22 collecting 226:5 collective 224:18 collectively 115:5 College 2:2 colored 234:11 Columbia 4:10 232:7 234:6,8,12 235:13 236:5 237:9 248:6 271:22 272:5 Columbus 1:21 26:17 53:1 58:11 98:8 112:4 280:1 307:18 309:2 Column 246:14,15 columns 246:22 combine 236:6 combined 174:3 210:8 259:13 come 8:11 9:3 23:15 39:15 40:6 48:21 58:15 64:22 90:13 108:21 117:16 126:19,22 177:16 182:2 194:5 199:19 222:1 231:21 236:3 244:2,9,18 246:3 256:11,15 270:15 272:19 309:7 310:4 312:14 315:19 318:12,17 comes 33:22 56:21 67:12 69:9 101:1 181:20,22 190:8 263:7 264:12 274:16 276:10 comfort 204:19 comfortable 29:16 239:22 240:9 250:3 261:10 289:17 318:9 comfortably 72:5 coming 8:10 81:10	116:2 182:21 263:20,21 268:2 comment 22:8 50:11 51:17 63:12 73:10 75:18 79:21 82:22 158:19 180:8 188:12 192:11 199:12 214:21 230:19 248:20 256:7 286:1 289:2 291:15 297:18 298:18,19 307:19 315:15 316:16,18 commentary 113:12 comments 5:16 12:12 30:3 33:4 37:5 48:13 62:11 62:13 63:16 68:14 69:2 74:22 76:21 84:2 86:19 87:22 93:21 100:12 117:10 118:22 122:22 123:10 140:15,18 152:8 155:6 176:1,6 178:2 179:15 189:14 195:12 210:17 217:4,11 222:8 261:20 267:14 277:14 305:21 306:4 Commerce 26:8 31:19 79:10 80:8 86:1 88:13 105:18 105:20 124:9 166:17 commercial 16:11 49:19 50:3 55:11 55:13 56:2,3,10 56:11,14 88:9 94:13 135:18 198:18,20 206:15 249:9,19 Commission 2:8 commissioner	110:11 committee 1:4,6,12 5:7 8:17 33:10 40:4 53:12,18 57:16 82:19 83:4 86:5 89:20 90:5 108:6 157:6 192:3 248:4 249:14 269:16 311:11 318:7 common 144:15 223:21 261:2 285:19 commonly 135:1 communicate 185:16 communicated 157:14 184:12 188:14 communicates 145:18 communicating 30:17 184:13 communication 115:7 175:14,21 181:19 186:3,12 186:17 188:18 193:1 292:1,10,20 293:5 communities 16:7 16:10,18 81:18 90:3 community 13:2 15:15,15 20:13 24:16 204:12,18 companies 78:7 Compare 161:19 comparing 223:10 224:15 compete 56:10 compilation 309:21 compile 5:16 complaint 62:3 complete 210:14 290:22 317:19 completed 120:16 211:8	completely 18:18 137:4 139:21 228:8 289:2,4 complex 266:5 compliance 124:13 complicated 41:22 47:7,7 239:19 243:9 complication 176:13 complies 119:16,18 comply 261:4 component 124:4 158:22 220:7 236:15,16,20 components 119:18 135:13 237:18 compound 64:12 compressed 264:13 compromise 38:21 39:16 44:13 64:3 compromises 106:11 computation 263:21 computer 12:19 76:22 concept 27:18 72:18 100:1 104:8 134:21 concepts 64:13 286:2 concept's 45:17 concern 28:4,6 34:5 40:14 57:10 80:21 88:18 97:14 202:22 213:7 265:14 concerned 27:17 69:12 211:11 230:3 241:6,10 252:1 concerning 69:17 260:11 concerns 12:9,16 25:17,21 34:9 42:1,1 47:10
--	--	--	---	---

48:11,18 60:1 61:16 62:18 70:19 76:21 161:6 217:16 218:6 270:3,12 concerted 216:13 216:16 217:14 220:14 conclude 131:9 concluded 212:4 conclusion 63:17 63:18,19 86:6,13 177:17 246:3 conclusions 130:2 163:2 concrete 84:9 concur 72:5 concurrently 166:20 condition 240:22 283:10 conditions 21:10 21:22 22:7 conduct 313:18 conducted 19:17 149:10 150:7 151:18 152:18 174:16 conducting 177:9 conduit 186:22 conference 33:20 62:13 126:16 311:13 conferences 172:9 confirm 77:5,11 confirmed 77:8 conflict 265:8 conflicts 121:11 confronts 46:3 confusing 272:18 302:22 confusion 114:9 Congress 80:13 93:17 conjunction 151:15 connotation 30:18 cons 304:5 315:11	conscience 27:21 consensus 27:14,19 27:22 51:14 55:12 67:19 71:17 87:2 181:22 consequence 94:17 241:5 consequences 181:16 189:5 242:17 243:1 Conservancy 1:24 conservation 42:17 106:3 123:21 133:3,22 160:16 163:8 245:15 250:20 251:4 263:18 conservative 173:22 174:12 conserve 124:18 consider 38:11,14 39:1 40:15 47:1 50:12,14 97:16 101:10 136:20 137:2 138:21 178:7 180:2 193:12 254:6 263:17 267:8 286:16 315:12 considerable 240:12 consideration 40:6 129:16 131:15 160:8 214:2 247:11 considerations 35:2 126:1 130:4 197:6 248:17 considered 118:12 135:17 160:16 162:20 163:11 190:18 209:22 247:8 286:14 297:18 298:3 302:9 305:10 considering 131:3 191:18 210:22	281:17 286:12 considers 162:22 consistency 156:8 168:17 223:5 273:22 277:6 consistent 90:6,7 91:7 154:6 155:1 169:6 189:12 191:7 194:3 223:17 224:6 273:10 consolidation 14:20 15:3 constant 242:21 constantly 269:18 consternation 114:9 256:8 constituted 309:7 constrain 303:5 constrained 118:17 constrains 264:5 constraints 115:12 117:16 122:17 136:2 216:1 consultant 2:6 285:2 consultation 113:7 114:17 118:6 120:13,15,18,20 121:7,18 126:2 127:2 134:14 135:1 136:1,4 137:1,15 141:21 142:15,18 144:1,3 144:4,11,15,16,21 145:1,19,21 149:7 149:13 152:21 153:19 155:21 156:1,2 157:11 161:11,13 163:11 164:8,20 167:22 169:6 175:5,9 177:10 178:7 180:5 183:4,8 185:17 190:6 191:20 193:11 194:11 195:2	197:1,5,14,22 198:8 199:20 200:8 201:18 203:4 208:8 210:14 219:13 220:13 263:8 274:8,13 282:1 286:13,18 287:2 296:20 297:7 307:4 consultations 108:12 112:20 113:3 116:16,17 120:10 125:14 126:5 128:21 135:4 136:19 145:10 158:12 164:11 165:12 193:17 199:7 271:8,9,16 272:2 275:6 276:21 281:19 consulted 137:9 157:13 296:21 consulting 114:13 124:10 127:14 135:5 144:5 145:9 contains 124:6 content 6:5 90:11 189:12 contentious 310:22 contents 158:1,7 contested 50:22 51:14 context 12:7 26:21 85:15 136:21 137:1 253:9 301:5 continue 16:5 20:18 84:17 89:11 99:21 102:8 177:2 311:20 continued 74:3 125:7 206:9 continuing 205:19 227:15 contractor 68:17 68:19 240:15	241:17 267:21 contrast 59:14 contributing 254:1 contribution 134:3 140:2 control 167:17 196:5 275:5 controlled 268:8 controls 268:10 controversial 50:22 298:22 controversy 182:1 294:12 convenient 313:15 convening 252:8 conversation 115:20 117:6 288:12 290:2 295:7 305:5 310:4 310:8,14 conversations 97:19 301:9 302:20 303:10 305:1 conversation's 9:5 convey 172:22 Cook 132:14 cooler 295:6 cooperating 291:18 Cooperation 279:17 coordinate 113:15 181:14 224:1 coordinated 180:17 180:18 282:3 coordinating 112:10 277:8 291:18 coordination 113:7 142:11 181:12 222:16 223:5 274:21,22 277:12 282:13 283:22 285:5 287:19 311:11 coordinations 156:5
--	---	--	--	--

Coordinator 109:20	197:21 198:2,10 199:15,21 201:20 203:15,17,18,22 204:1,6,8,13,14 204:16,20 206:6 207:6,13 208:4,9 208:14,15,19 209:6,11,12 210:18 212:10 213:3,10,15 214:9 214:19 215:8 216:2,5,17 217:5 217:10,16 218:22 219:6,11 220:4,17 221:9 222:16 227:14 228:2 232:19 233:14 234:1,19 235:20 236:10 239:4 241:20,22 244:16 244:20 247:7,8,15 248:13,21 249:8 249:12,20 250:15 252:1,3,6,10,13 252:18 253:6,18 254:14,15 255:1,4 255:6,10,17,21,22 256:17 257:10 258:20 260:12 261:8 262:9,14 264:10 266:1,13 266:22 269:2,12 269:17,21 270:11 270:19 277:2,8 283:9,13 284:7,15 284:22 285:6,11 285:12 287:1,1,14 288:22 289:10 291:9,22 297:17 298:2,10 299:2 301:3 302:2,3,9 303:8 304:9 306:10 311:11 312:3	112:22 114:19 135:12 136:7 165:16 178:13 179:7 180:4 181:15 190:10 191:6,15 194:18 203:10 207:12 213:18,20 214:11 214:17 278:13 284:1 286:12,16 291:3 292:22 304:12 311:9,19 315:20	crafting 85:2 Craig 3:10 113:20 114:5 122:14 138:5,10 144:2 164:14 224:7 229:3,5 273:18 Cramer 248:14 create 26:19 81:17 90:11 117:18 191:9 294:21 created 288:22 creates 46:17 124:22 creating 90:2 303:12 creative 313:21 creatively 115:5 116:11 credibility 240:13 247:22 248:22 credible 19:18 36:1 195:10 249:16 credit 74:15,17 251:2 269:16 criteria 35:4 38:1,2 119:13 255:8 267:10,11 283:12 287:17 289:5 critical 17:4 120:8 125:9 126:3 128:5 132:19,21 133:2,3 133:6 137:13 138:11,22 139:11 264:1 267:3 283:3 311:18 criticizes 69:16 critiques 69:17 cross 104:2 crossed 62:21 81:13 crossing 198:11 cross-wise 130:5 crystallize 295:1 cumulative 129:10 cure-all 20:12 24:19,21 25:5,21 curious 262:6	272:11 current 77:6 80:10 88:15 currently 80:16 148:4 179:14 254:21 304:2 cutting 104:2 C-O-N-T-E-N-T-S 3:1
coral 64:5 66:20 67:9 71:10 corals 60:11 62:2,8 63:2 68:1,7,15 69:1,4,10 72:16 103:11,13 coral's 67:14 core 29:1 Corky 112:10 correct 9:18,21 77:7,19 189:19 correctly 58:22 correlated 258:12 correspond 139:19 council 3:19,25 4:19 17:20 24:17 38:7 45:14 50:17 50:21 51:15 78:2 78:22 79:8,12 80:5 109:18,21 110:11,15,18 111:1,3,14 112:9 112:10,11,16 118:10 121:2,4,15 121:19 141:3 142:6,10 143:2,15 144:12,12 145:3 152:13 153:2,16 154:4,5,17,18 156:6,9,14,17 157:1,2,6,16 158:3 159:9,21,22 166:8,10,22 167:6 168:6,6,15 169:2 169:7 172:10 175:16 178:1,4,6 178:16,19 179:15 186:4,12,14,17,21 189:6,7,16 190:4 190:12,17 192:18 193:16 196:10	council's 155:9 201:8 241:3 248:3 254:5 257:5 262:21 282:17 283:4 306:11 315:1 count 214:8 counted 169:8 countries 32:16 country 233:6 273:19,20 274:9 274:14 counts 170:1 couple 6:9 7:14 25:14 49:2 53:7 68:13 75:14 85:4 102:14 108:7 178:2 184:8 222:8 226:9 247:9 262:5 282:15 311:10 couple-three 246:22 course 6:8 115:10 163:4 245:8 court 125:17 130:5 261:4 290:8,14,17 296:13 297:4,22 cover 5:21 211:15 coverage 161:15,21 162:6,7 163:22 217:19 218:7,12 218:16 covered 291:17 craft 83:12	credibility 240:13 247:22 248:22 credible 19:18 36:1 195:10 249:16 credit 74:15,17 251:2 269:16 criteria 35:4 38:1,2 119:13 255:8 267:10,11 283:12 287:17 289:5 critical 17:4 120:8 125:9 126:3 128:5 132:19,21 133:2,3 133:6 137:13 138:11,22 139:11 264:1 267:3 283:3 311:18 criticizes 69:16 critiques 69:17 cross 104:2 crossed 62:21 81:13 crossing 198:11 cross-wise 130:5 crystallize 295:1 cumulative 129:10 cure-all 20:12 24:19,21 25:5,21 curious 262:6	D Dalzell 3:18 109:22 140:22 141:2,2 143:9,10 146:3 152:9 155:7 166:9 185:21 186:2 188:11 189:15 damaging 17:2 Dan 110:17,19 112:17 232:19 240:16,17 241:13 255:20 280:17,18 280:19 282:14 283:17 287:13 290:15 dashed 243:9 data 1:19 57:8,10 57:15,18,19 135:18 145:11 165:8,11 169:16 169:22 177:16 181:20 183:14 190:12,14 200:11 201:1,19 212:20 215:12 216:19,22 217:17 218:7,9,20 219:14,22 220:5 226:6 250:3 266:3 267:19 268:1,4,11 268:21,21 269:5 282:20,22 databanks 269:2 data-rich 240:7,8 266:4 date 39:3 41:19 119:5 168:16 dates 121:8	

Dave 2:4 34:10 55:1,19 60:19 63:21 66:5 70:22 71:13 83:6 85:3 86:17 317:20	257:20,21 decided 33:9 191:22 204:2 244:8 302:16,19 308:15 314:13	defined 178:9 267:17 268:17 definitely 183:8 195:13 197:16 224:21 226:7	depicted 184:2 depletions 15:22 deployed 147:19 148:6 depths 148:17 deputy 4:18 110:22 232:18	188:1 294:8 determine 119:15 244:5 determined 218:21 220:15 257:17 determining 126:1 217:20
Dave's 41:10	deciding 211:21	definition 133:7,12 133:15,17,19 297:10	derived 241:7	develop 39:9 136:11 164:1 166:13 170:14 178:21 180:1 183:6 206:21 207:11 212:13,14 219:8 226:15 254:8 268:21 288:6 303:1 310:21
David 2:11 3:21 112:7 116:5 195:19 207:16 215:17,21 216:8 217:4,22 223:14 227:7 273:9 279:10 286:2 301:1 317:21	decision 118:20 119:6,7 178:11 182:12,14,20 183:9 191:9 204:11 224:11 270:13,21 271:6	definitions 134:7 definitively 255:15 degraded 20:8 degree 135:16 DEIS 210:16,17	design 38:5 39:1,18 127:1	described 67:22 83:3 130:20 187:20 193:7 256:13
Dawn 232:6,10,11 232:17 280:11	decisionmaking 215:14	delete 11:18 30:16 32:20 82:21 84:1 90:21 91:3,3 96:4	designate 73:21	designated 2:15 74:9 125:9 133:22 134:12,16,19 137:13 138:19 139:13,15
Dawn's 232:18	decisions 51:4 90:9 200:2 214:13,22 221:9 293:12 294:7	deleted 81:16	designations 74:5 74:10 139:12	designed 116:15 desire 72:12 95:10 desired 215:10 218:4
day 45:13 55:12 102:22 105:5 108:20 112:1 169:9 178:22 188:21 195:8 199:17 261:8,9 278:1	deck 32:14 42:22 decline 146:14 declines 21:9,21 22:6 declining 205:5	deleting 48:12 49:15 81:19 82:3 deletion 48:9 deletions 8:13 49:3 49:12 76:17	designations 74:5 74:10 139:12	desperately 78:14 destroy 125:8 137:12 destroyed 68:18,20 destruction 133:8 137:17
days 121:1 136:3 155:17 169:8 208:3 242:7	deconstructing 128:16	deliberate 133:6,16 154:19 204:10	designed 116:15 desire 72:12 95:10 desired 215:10 218:4	developing 26:13 144:13 154:12 156:7 165:16 167:9 226:4 252:17 265:2 303:21
deal 58:12 77:12 78:11 260:14 264:14 293:4	deconstruction 128:11	deliberating 125:11	desks 273:7	development 27:19 46:22 84:17 105:22 151:16 152:14 157:13,18 159:13 160:5 166:4 176:4 178:17 185:9 190:11 198:2 201:18 206:10 213:12 217:3 237:15 241:16 262:15 285:9,13 287:4 298:11 300:7 302:5 306:14,21
deadline 119:5	decrease 246:6	deliberation 250:18	desperately 78:14	devils 45:10
deal 58:12 77:12 78:11 260:14 264:14 293:4	decreased 246:5	delisting 230:21	desperately 78:14	
dealing 26:20 69:6 122:8 148:9 161:16 199:3 203:16 216:17 219:5,5 261:12 292:11 308:9	deemed 220:1	demands 216:17	desperately 78:14	
deals 68:14 130:15 271:15	deep 148:2,12,22 149:4 150:5,20 161:19 174:10 202:8	demographic 170:13 226:15	desperately 78:14	
dealt 70:15 308:12	deeply 311:2 317:5	demographics 239:17	desperately 78:14	
debate 67:18	deep-set 172:12,16	demonstrated 209:15	desperately 78:14	
Decadal 165:6 173:7	default 134:6	Dennis 171:22	desperately 78:14	
decade 205:5	defend 49:15 69:15 70:6 190:16	density 134:18 138:14,16	desperately 78:14	
December 153:3 158:21	defensible 176:15 195:10 250:5	depart 278:3	desperately 78:14	
decide 38:8 120:15	defensive 117:7	Department 90:4 110:12 166:16 268:5	desperately 78:14	
	defer 33:9	depend 123:22 124:19	desperately 78:14	
	deferred 103:6	depending 9:5 10:18	desperately 78:14	
	deficit 98:11,22,22 99:4,5,8		desperately 78:14	
	define 38:15 39:9		desperately 78:14	

devoted 25:15 26:12,13	difficulty 36:2 46:2	discussion 5:9,14 6:11 11:22 14:8 14:12 22:2 23:21 25:4,7 28:16 30:11,14 31:1,15 31:21 32:2 42:13 44:15,20 45:4 46:20 47:4,8 48:6 48:19 54:5,10 55:6,8 58:2 60:10 61:13 65:11 75:2 90:17 95:8,15 99:16 100:3,7 101:16,20 103:3 103:19,21 104:16 105:14 106:7 108:15 109:11 114:22 136:10,14 142:15,21 164:15 165:19 167:18 180:10,13 186:10 192:3 195:13 233:8 274:13 278:7 300:6 307:18 310:1	305:18	135:16 156:9 178:21 179:16 180:1 193:3,3 195:10 288:17 302:11,22 307:10 312:7,9
dialogue 175:17 299:22	dig 293:22 311:2		district 297:4,22	
diametrically 138:2	digest 24:2		dive 10:9,22 55:15 196:19 211:20	
dictate 303:5	digested 247:6		diversity 25:2 35:16 239:16,17	
dictated 227:2	digestible 249:7		diving 22:9	DOELLING 2:13
dictation 167:19	digesting 14:18		division 79:15 141:16 144:13,18 144:22 145:2,8 152:21,22 155:22 157:3,22 158:6 166:1 186:11 187:1 188:15,17 194:7 203:18 210:12,13 233:2,4 264:19 265:4,22 271:3,14,21 273:12 274:4,5 279:17	Doerr 1:24 3:2 6:13 10:17 12:13,21 13:13,18 14:1,14 23:20 25:8 28:11 29:12 30:4,12,20 31:2,9,13,16,22 32:3 33:3,13 34:14 37:3 44:12 44:16 45:3,5 46:1 46:21 47:9 48:20 51:16,20 52:17 53:21 54:22 55:19 57:4 58:1,17 59:1 59:9,21 61:6,14 63:10,21 64:14 65:3 66:3,15 70:22 71:3 72:8 72:22 74:22 75:5 75:8,13,22 76:4 77:15,21 81:2,11 82:5,8,15 83:5 85:3,8,11 86:17 87:22 89:2,8,16 90:15,18 92:6,9 92:12,16,20 93:21 94:5,20 95:7,21 96:11,22 97:3,18 98:7,14,19 99:9 100:8,13 101:13 102:11 103:20 104:13 105:1 106:14,19
die 67:16	dinner 9:8			
Diego 279:19	direct 101:3 147:16 306:16			
differ 49:14 189:1	directed 126:19,22 127:6 198:14 209:13			
difference 78:20 192:17 193:15 243:8	direction 186:13 241:1			
differences 137:8 155:8 307:22	directives 293:18			
different 10:7 18:19 22:17,18 24:22 37:4 38:10 73:5 78:21 93:10 99:3 100:15 122:4 128:1 129:11 131:10 139:1 142:8 144:10 162:2 168:14 177:14 179:17 184:3,16,19 190:3 191:5,6 200:3 223:12 225:8 233:16 236:3 240:19 244:6 272:7 276:1 277:12 281:16 283:21 285:4 302:14 308:12	directly 56:10 89:22 188:14 198:1 214:9			
	Director 3:6 4:18 110:22 113:18 127:5			
	disagree 50:8 82:22			
	disagreeing 94:7			
	disagreement 8:6 81:21			
	disappeared 15:4 16:3			
	disapproval 119:14 119:22			
	disapprove 119:10			
	disciplinary 203:7			
	disclosure 302:4			
	discovered 146:16 205:10 212:18			
	discovery 197:7			
	discretion 118:18 307:7			
	discuss 6:4 8:22 55:2 74:21 142:16 304:9 308:17			
	discussed 40:2 158:1,7 165:21 203:19 315:8			
	discusses 57:7			
	discussing 56:18 95:17 193:20 225:19 304:17			
		dismissed 291:3 33:19 53:22 103:7 108:22 153:17 213:1 265:7 282:7		
		dismissal 161:12 177:16 318:1		
		dispute 67:2		
		disputes 126:17 128:12		
		distance 109:5 111:18 140:11 157:17 159:12 189:4 231:16 313:9		
		distill 108:21		
		distilling 277:18		
		distinct 230:11		
		distinction 56:16 79:22		
		distributed 281:11		
		distribution 202:5		
			documented 68:8	
			documents 8:15	
				doing 69:20 88:22 120:6 199:14 207:7 230:14 251:11 265:21 274:17 295:19 299:17
				dollars 36:5
				dolphins 69:8

domestic 96:17 98:18 99:21 100:11 Don 269:16 door 115:22 256:7 256:13,15 double 99:12 doubling 218:18 doubt 65:22,22 Downeast 18:4 dozen 20:18 71:22 DPS 230:22 DPSs 224:14 230:21 DR 54:4 77:17 79:4 89:18 311:7 313:10 314:11 318:3 draft 8:16 45:7 78:6 85:16 104:21 122:6 145:12 157:22 158:3,8 165:20 185:12,15 208:10 253:18 254:19 286:4 287:3 288:8,21 289:19 290:1 297:19 300:7 301:4,18 302:15 302:16 304:18 305:8 306:3,5 316:13,17,18 drafter 188:13 drafting 11:4 213:14 drafts 27:2 288:16 303:13 306:15,16 draft's 27:3 drainage 71:9 dramatic 260:9 dramatically 294:11 drawing 167:6 drilled 152:9 drive 13:22 54:17 driven 183:19 231:3	drives 169:8 driving 67:13 219:11 drop 147:8 dropped 205:6 238:9 drop-through 37:22 drove 56:13 ducks 13:3 due 156:15 251:1 DUNN 2:14 53:7 54:16 57:6 58:19 durability 39:19 duration 37:15,17 dwell 246:11 dynamic 20:14 26:20 dynamics 42:10 DYSKOW 1:25 10:13 D.C 297:4	112:14 eclipsed 146:14 ecological 13:8,10 14:11 17:6,15,19 18:11,19,21 20:22 21:8,14,16,20 22:5 24:6 25:1 28:22 29:8 economic 13:6,9 14:6 15:16 17:1 29:4 33:17,21 95:18 economics 20:4 economist 203:13 ecosystems 13:16 123:21 124:18,19 Ed 32:8,9 112:14 281:2,6,8 316:15 edit 5:15 editing 9:20 edits 5:19 6:2,4 11:7 54:3 76:15 77:3 81:5 Educate 31:11 EDWARD 1:18 EEC 80:4 EF 244:21 effect 18:10 71:10 71:14 120:2 131:11 137:21 138:1 150:11 153:5 211:9 229:10 255:10 effective 44:11 73:22 212:6 effectively 128:3 140:1 218:17 220:5 effectiveness 57:8 effects 29:1 66:1 129:10 162:16 163:9 169:21 242:16 efficiency 290:4 efficient 179:22 195:8 effort 20:9 41:17	45:15 146:21 151:13 152:16 155:11 162:5 187:21 209:18 216:14,16 217:15 218:18 220:14 223:4,17 225:11 225:12 227:4 244:12 248:15 249:22 251:3 278:17 efforts 151:10 163:8 225:13 265:4 EFH 73:6,14,19,21 74:4,5,6,9,10 EIS 156:7 157:10 198:3 either 8:11 9:7 45:11 47:5 59:18 67:17 75:15 76:7 83:1 102:21 186:12 282:18 284:2 286:11,21 296:8 300:10 elaborate 177:6 elemental 304:18 elements 151:8 eliminated 15:20 20:6 209:17 eliminating 102:1 Ellsworth 1:13 email 7:19 9:7 emailed 44:12 embrace 251:13 267:4 embraced 294:14 emergency 206:7 207:22 211:5,15 emerging 67:22 72:16 242:4 Emily 2:17 312:3 emphasize 201:6 213:19 244:12 259:7 281:14 employ 182:12 enabled 251:15	enacted 168:9 encourage 73:17 115:14 116:10,22 endangered 87:15 115:10 118:6 120:5,9,18 123:15 123:20 124:17 125:8,15 126:13 130:11,15 134:5,7 140:20 155:20 185:3 211:14 228:3 234:16 236:14 308:19 ended 15:22 68:12 99:13,14 endorse 27:15 endorsed 89:20 endorsement 209:15 211:22 ends 177:18 271:17 energy 225:10 316:22 enforce 89:11 enforced 97:8 enforcement 7:17 7:17 enforcing 96:9 engaged 168:20 engagement 153:17 154:14 192:18 engages 168:13 engaging 176:6 engine 15:16 England 15:9 19:14 24:16 111:16 ENGO 301:11 ENGOS 300:14 enhance 292:13,14 295:22 enhances 21:5 enjoyed 227:8,21 enrollment 167:6 ensure 19:15,16 120:6 125:5 137:15 156:8 223:4 251:3
--	---	---	---	--

269:18,22 312:9 ensuring 283:22 entangled 126:13 enter 165:19 entered 203:7 enterprises 53:14 entire 16:15 149:10 149:13 171:11 199:8 249:21 entirely 214:1 313:19 entirety 252:12 entities 144:10 252:1,8 268:22 entitled 185:6 247:3 306:17 entity 131:22 132:13,18 144:17 145:7 229:17,21 entrance 43:2 entrants 35:22 37:2 37:6 40:6,12,16 40:20 42:13 47:3 entry 147:20 environment 308:8 environmental 129:9 145:5,5 160:15 163:9 169:19 204:7,18 environmentally 99:22 100:11 equally 5:8 equate 236:18 equation 294:22 equipment 15:16 equity 43:7 equivalent 134:20 136:9 139:18 Eric 106:3 erode 44:10 err 242:13 erratic 173:5 error 137:19 242:17 243:1 errors 134:22 ESA 3:4,5 105:19 108:11 112:21	117:17 119:20 137:14,19 152:6 152:21 155:18 156:1 157:11 164:16 216:3 217:2 221:14 222:4 237:1 244:22 255:8,14 255:19 257:8 276:9 277:4 281:18 282:1 escapement 242:9 242:15 especially 67:15 144:3 176:18 215:15 222:19 293:19 essence 73:16,19 essential 73:5 essentially 82:18 149:6 171:8 173:15 218:17 establish 247:20 established 49:8 68:8 71:11,15 237:6 247:21 250:21 259:14 284:17 establishing 264:21 estimate 208:6 220:22 246:13 264:10 estimated 162:14 163:19 218:15 estimates 203:22 206:16 ESUs 272:7 et 25:2 100:11 252:9 300:14 301:12 306:2 evaluate 171:14 172:1 evaluated 171:4 events 67:10 201:5 203:2 Everglades 71:9 everybody 5:4,17	6:14,20 8:9,19 9:2 10:22 13:20 26:4 29:5,15 41:20 43:17 71:20 72:9 73:4 74:8 105:2 105:11,13 106:14 108:4,16 110:4 111:17 112:2 115:2 116:10 140:12 141:7,13 143:11 179:1 180:21 222:11 232:4 253:15 259:10 261:3 263:6 269:3 278:11 302:17 309:12 316:18 319:6 everybody's 5:16 292:8 294:10 evidence 130:9 131:3,3,4 evidence-based 268:6 evolution 184:5 271:6 evolved 27:7 evolves 183:16 ex 36:21 292:17 exactly 88:15 135:5 208:12 210:11 251:6 270:6 examined 71:14 example 14:16 21:11 36:20 46:13 136:12 163:16 165:2 170:20 188:9 199:13 240:15 261:21 267:20 291:21 313:12 examples 116:16 225:8 exceedance 203:19 exceeded 203:6 excellent 47:15 98:7 241:18	exception 139:13 exchange 254:18 276:19 299:13 312:11 exchanging 121:16 exclamation 205:13 excuse 108:16 232:14 235:14 281:3 executive 10:2 11:5 exhaustive 310:6 exist 46:5 89:11 existed 207:9 existence 125:7 283:11 existing 81:22 91:16 95:3 96:6,9 97:9 200:19 201:2 284:2 exists 36:2 46:11 133:15 284:17 expansion 146:18 147:5 expansive 74:11 expectations 264:21 expected 162:9,12 189:22 319:3 expensive 170:12 266:11 experience 215:8 221:14 252:22 274:18 315:1 experiences 225:12 expert 77:18 expertise 69:1 197:22 228:1 experts 198:9 312:21 expire 43:16 expiring 211:6 263:9 explain 19:9 128:22 184:22 209:5 262:7 266:14 296:6	explained 249:21 251:10 explaining 255:6 explicit 40:5,12 124:7 208:14 explicitly 133:14 165:1 exploit 19:22 exploitation 237:5 242:20 243:5,10 243:16 245:4,7,12 259:9 exposure 128:18 257:7 extend 16:1 309:11 extended 120:11 136:4 289:10 extensive 25:12 126:4 extensively 55:18 213:12 extent 54:8 87:10 164:1 271:15 extinction 172:15 245:10 extirpated 19:18 extract 267:6 extrapolated 200:22 extrapolation 161:17 extrapolations 162:1 extreme 284:5 extremely 227:19 e-mails 274:16
F				
face 68:6 faced 256:4 262:13 faces 304:6 face-to-face 313:17 facially 133:12,17 facilitate 274:22 312:16 313:1 facilitated 176:5 facility 93:6				

fact 18:6 26:4 28:20 32:13 43:8 43:21 63:3 87:9 89:14 90:10 117:1 137:12,21 173:7 176:2 189:3 204:16 207:22 214:1 228:5 240:9 261:4 271:8	fathoms 202:9 fault 19:20 favor 40:1 feasible 257:17 features 147:4 February 254:4 314:10,14,16 fed 198:1 federal 2:15 78:13 80:11,19 118:5 129:14 133:10 144:6 155:4 159:18 166:11,18 167:4 169:10 258:5 272:1 297:3 304:19	fill 103:9 118:2 220:15 final 27:3 76:11 106:7 121:5 151:2 153:4 155:3,18 156:7 157:10 159:3,4 166:5 201:14 209:11 210:11,18 211:6 212:21 214:22 246:22 305:11 306:14 finalized 53:9 185:16 210:21 finalizing 213:14 finally 176:9,22 209:10 212:5 financial 92:3 93:3 93:6,12 252:4,6 financially 241:19 financing 94:8 find 29:18 30:17 46:16 54:7 70:2 315:5 finding 149:11,14 150:12 151:3 153:2 171:19 172:3,18 173:9 174:5 182:10 findings 12:8 29:22 40:3 76:20 84:7 173:13 174:9 203:19 207:14 226:3 309:8,13 310:10 fine 28:5,10 39:11 87:8 94:3 96:13 97:2 finfish 215:9 216:18 219:6 finish 9:13 75:16 76:8 89:7 105:13 105:21 firmly 65:16 first 6:13 26:17,17 27:4 30:13 42:11 48:12,20 53:10	57:7 61:10 62:20 66:16 82:6 83:20 85:5,9,10,11,12 87:7,7,20 90:20 96:14 98:4 99:19 99:19 102:12 123:21 130:15 132:12 136:1 140:9 162:4 195:22 197:4 204:17 222:11,20 223:3 229:5 231:5 232:9 247:14 254:5,10 257:9 268:20 291:16 299:8 316:13 fish 1:21,22 3:21 15:13 17:8 18:3 19:1 20:18 24:9 40:21 43:6 52:1 53:11,17 54:6 55:13,21,22,22 56:1,6,6,7,9,11,12 57:1 59:13 62:7 62:17 73:5 110:12 147:15 191:17 195:19 197:11 198:12,16 200:12 202:1 204:4 208:2 226:11,18 234:9 234:14 236:13 242:10,21 243:18 243:18,20,21,22 245:6 248:7,15 260:21 270:18 271:15,20 280:2 308:16 fishbowl 235:21 fished 56:4 152:3 210:3 Fisher 2:8 22:14 fisheries 1:4 2:8 3:9 13:7 14:10 15:1 25:22 30:1 31:3 35:16 41:20 42:17 44:8 50:20 74:14 102:13 109:14	112:6 113:21 114:1,10,11,14,16 115:15 116:18 117:11 125:4 126:8,12 136:1,11 137:5,7,10 142:5 143:2,13 144:5,13 144:14,18,18,22 145:7,9 148:10 152:21 153:7,15 154:3,18 155:16 155:22 156:6 157:3,22 158:5 165:8,15,22 166:16 169:4,18 170:3 171:2,11 172:10,14 175:5 175:12,15 176:12 177:1 182:21,22 183:9 184:5 187:1 188:3,16 192:20 193:1,8 198:21 203:12 206:18 210:12 219:17 221:15 233:4,14 234:16,17 235:4 235:12,20 236:10 236:12 254:2,15 258:22 259:12,12 259:17 260:13,18 263:14 268:1,2 269:2 271:14 279:15 280:8 284:1,22 285:6 286:18 296:21 298:14 309:9 311:13 fisherman 36:17 55:11,13 56:2,3 56:14,20 258:6 fishermen 16:11,18 16:21 19:20 35:17 46:4,12 56:8,9,10 301:12 fishers 252:1 fishery 3:10,14,18 3:21,24 5:11
--	---	--	--	--

15:19 16:17 17:3 18:7,11 19:2,4 20:3,6,17 21:9,21 22:6 35:13,16,19 36:15 40:7,17 43:3 45:14 46:19 49:16 51:11 53:20 53:20 59:5 74:16 74:17 79:9,16,19 108:5 109:18 112:21 118:4 125:5 128:12 135:4 139:7 141:20 142:17,19 145:14 146:2,4,4 146:7,11,15 147:5 147:10,11,12,21 148:1,2,3,4,22 149:4,5,7,8,11,13 149:18 150:3,5,14 150:16,20 151:4,6 151:9,12,21 152:17 153:9 154:22 156:15,16 160:9,12,14,18 161:14,20 162:9 162:11,15 163:20 166:11,14,14,20 167:9 169:10 170:5,21 171:21 172:2,5,12,17,20 173:16 174:1,7,11 174:12,13 176:19 186:11 195:19 196:22 197:11 198:12,14,19 199:1,2,5,8,10,16 200:12,14 201:16 202:20 203:14 204:4,20 205:11 209:19 210:9,22 213:13 214:3,15 218:17 219:21 220:7 221:1,11 222:3 224:20 244:15,21 248:1,2 248:10,21 260:7	265:10 266:8 267:22 272:19 279:11 281:19 282:2 285:10,13 297:16 301:6 311:8 fishes 46:8 170:4 fishing 6:7 10:18 10:21 13:2 15:15 16:9 17:2 18:4 20:8,13 24:16 49:1,5,7 58:8,21 59:2 88:4,9 94:12 103:5 146:7 155:11 162:4 163:17 198:16 249:9 254:11 255:1 258:3 259:6 261:6 298:3,7,13 fit 114:21 fitness 137:4 fits 18:14,16 45:2 five 5:20,22 6:6,10 8:2,6 31:6 43:16 60:8 61:10 76:11 85:10 100:16 140:5,6 175:1 215:18 218:15 258:1 278:5 fix 53:5 fixed 9:22 18:7 136:8,12 137:6 238:12 242:9,15 242:19 243:10 245:4,7,11 flag 305:4 flagged 105:2 flagging 37:20 flagline 146:11 flags 146:10 flat 93:13 147:7 flattened 15:1 fleet 14:21 15:3,10 36:16 46:8,18 53:17 146:14,20 147:13 fleshing 315:4	316:7 flexible 179:6,7 floated 122:5 309:16 floating 27:2 205:13 floats 148:15 flooding 306:4 Florida 2:2 55:4 198:15 202:5,16 205:4 229:15,19 279:9 flowed 7:7 flowing 115:20 fly 171:21 FMP 79:7,15 128:15 135:15 199:9 201:17 FMPs 119:8 121:9 136:6 focus 8:5,21 124:4 124:21 131:13 174:14 200:5 317:1 focused 237:1,3 310:7 focuses 73:4 236:11 239:15 focusing 108:7 238:3 279:21 FOIA 302:11 305:12,13 306:6 306:18 folks 9:7 11:6 30:7 34:5,7 48:16 52:8 63:22 70:1 72:18 73:10 76:3 91:1 96:11 102:18,20 103:2 115:15 204:11 240:12 247:6 270:16 271:4 272:10 295:19 297:8 follow 61:13 157:9 followed 136:1 168:7 189:19 217:7	following 13:15 118:19 143:3 150:6 153:6 173:21 211:10 follow-up 309:16 foot 35:15 36:6 249:2 foraging 202:13,18 forcing 52:14 162:18 173:2,6,8 forecast 165:5 264:9 foregoing 107:3 foregone 63:16,18 63:19 foreign 32:15 261:1 foresee 193:4 forever 12:11 forgot 11:13 form 145:4 194:21 267:11 300:13 formal 121:17 145:15 159:14 190:1 255:4 276:22 286:22 287:14,20 289:7 295:2 298:10 300:9 formality 289:21 formalize 293:4 299:1 formally 154:19 156:18 168:15 292:16 format 285:22 formed 157:10 217:20 247:16 284:21 formulate 265:17 formulating 263:19 formulation 222:17 formulations 210:1 forth 178:20 290:4 fortunate 174:14 forum 301:10 forums 305:2 forward 27:12 51:7	71:4 72:10 77:10 89:5 90:19 94:21 113:14 115:4,14 152:15 154:12 156:10 189:8 204:9 244:17 278:21,22 312:15 for-hire 53:16,18 54:8 for-profit 53:13 found 72:2 149:22 154:5 275:19 285:21 Foundation 1:23 four 7:6 64:13 76:11 125:22 144:9 237:21 239:15 257:22 268:7,9 fourth 212:10 Fox 191:13 frame 117:15 framed 161:4 framework 79:6,14 127:10 130:20 150:22 256:18,21 257:4,15 franchised 36:1 Franke 2:1 51:22 frankly 192:1 261:13 frantically 206:13 free 43:2,13 231:3 Freedom 301:20 frequency 246:20 fresh 105:5 234:4 Friday 314:12,14 friendly 75:11 front 12:6 38:19 39:9 86:10 199:15 224:19 263:13 292:10 296:18 frustrating 65:19 full 7:1 21:18 22:16 33:10 85:18 201:17 212:2 214:15 318:7
--	---	--	--	---

full-blown 292:3	genetic 89:12,22 239:16	globally 132:8	10:4 11:4,16 12:8 12:13 19:8 20:14 21:3 23:14 29:14 37:21 38:3,11,18 39:8 41:6,7 42:4 43:11,12,16,21 45:10,17,20 47:14 48:6 50:17 51:20 52:3 54:2 62:10 63:11,22 64:3 66:4,13 71:1,3 72:9,11 73:12 82:18,19 85:5,6 85:22,22 88:13 89:3 90:19 92:21 93:11 95:7 97:18 98:10 100:19 103:11,14,15 105:9,10 106:20 108:6,10,11,13,19 113:11,14,19 116:7 117:15 118:11,16 121:3 122:13,15 138:6 140:16 141:18 158:14 164:9 166:6,7 168:4 175:3 180:9 188:18 195:5,17 195:21 198:13 201:4,16 202:1 209:3,4 211:8 217:14 219:14 220:14 222:12 226:13 231:15 232:9 237:11 238:20 241:6,11 242:20 245:13 246:4 247:14 249:11 251:11 256:14,19 258:10 258:14 259:1,2 263:8,10 270:3 277:11 278:4 290:8 293:22 302:16 303:14 307:7 310:13	311:12 314:22 gold 106:15 Golde 3:6 113:18 114:3 272:17 golden 8:14 good 5:3 19:21 23:5 27:20 30:20 32:20 38:6 55:5 67:19 69:14 72:21 87:1 111:9 113:9 116:3 116:20 122:10 141:13 142:11 143:10 158:13 166:2 178:15 184:4 196:6,18 224:17 231:20 233:9,12 253:15 268:13 270:7 278:1,8 282:19 292:8 299:7 310:20 312:15 gosh 66:3 gotten 5:19 126:12 130:4 230:4 governance 104:3 government 82:2 91:12 92:1 97:16 168:18 governments 260:21 grammatically 9:21 grant 80:17 92:2 94:13,15 granted 296:13 granting 300:9 grants 91:22 graph 147:4,15 237:7,7 243:7,11 243:15 246:12 graphic 148:13 202:3 graphs 236:17 grapple 253:1 gray 239:21 great 6:21 11:19 53:5 71:14 101:21
full-time 16:11	genetically 87:14	go 8:4,20 10:18 11:14 12:8,14 20:20 22:11 23:18 29:17 31:10 45:1 46:12 47:14 52:12 54:7 55:16,16,20 66:4 67:3,5 76:18 85:6 86:3 91:6 93:2 95:15 100:1 102:12 107:1 115:21 116:8 120:2 123:12 128:14 129:1 135:9 141:4 143:6 148:6 149:5 151:3 152:7 166:7 186:7 192:7 196:3,20 202:17 206:11 211:14 215:21 217:10 226:22 233:19 234:4 239:8 242:11 244:1,17 247:12 251:16 257:1,17 262:3 267:9 275:18 276:22 279:5 281:10 283:19 290:20 296:3 306:3 307:11 308:16		
function 174:20	geographic 139:14 239:17	goal 79:5 84:10 242:15 287:7 314:3		
functions 13:4	George 2:2 77:1 81:8 82:15	goalpost 250:14		
fundamentally 265:12	Georges 16:4 17:10	goalposts 266:16		
funded 234:10 267:22	George's 83:7	goals 96:10 97:10 251:14		
further 27:8 67:16 124:16 140:8 146:8 179:21 206:6 239:22 268:12 305:5 308:17 310:21	getting 5:4 26:18 32:21 33:17 94:3 117:3 167:17 257:15 292:8,21 313:2	goes 41:8 42:14 44:2 57:9 64:20 78:13 130:21 169:22 182:8 259:14,15 273:19 302:3		
future 33:15 34:18 34:18 35:2 39:2,8 40:13,15 42:6 47:2 54:14 65:18 74:5 129:13,14 142:13 165:13 175:19 177:4 188:1 193:5 278:20	Gina 2:19 112:6 116:5 274:2,5 275:2 278:9 279:14 298:18 315:14	going 5:11,13,21 6:9,10 8:21 9:2,5 9:6,16,18,19 10:1		
fuzzy 85:19	Gina's 273:12			
F/V 1:23	give 7:2 14:15 30:7 74:15,16,17 101:11 108:9 109:3 141:22 142:1 204:12 207:7 208:19 232:6 233:11,18 239:7 307:12			
G	given 53:13 129:12 138:17 157:2 170:19 173:20 182:13,13 221:6 240:12 242:21 254:7 289:1 293:19 297:14 307:4			
gag 198:19	gives 21:10 205:18 245:15			
gaining 36:15	giving 197:21 198:9			
Game 110:12	glad 312:19			
gap 44:19 126:15	gladly 228:15			
gaps 118:2 165:11 177:3 295:10	global 17:9 69:10 69:21 70:11 132:11 223:11 228:22 230:1,11 230:16			
gavel 106:22				
GC 291:6				
GCF 291:2				
general 13:2 24:17 68:17,19 176:11 179:19 189:6 277:2,8,14				
generally 20:12 123:14 130:16 134:17 235:3 237:10 240:7				
generate 65:7				
generated 190:12 218:2 220:12				

104:14 143:20 180:21 253:10 256:8 280:15,19 281:1,9 309:5 314:9 317:8 319:5 GreatBay 2:2 greater 293:11 greatest 199:6 greatly 220:9 green 47:11 100:4 150:1 230:6,12,22 235:14 247:1 250:8 gritty 114:6 ground 238:22 251:3 271:15,20 groundfish 1:19 15:19 16:13,14 19:13 20:15 35:13 126:8 128:12 groundfishing 46:13 grounds 202:18 groundwork 196:18 group 1:25 3:3 6:15 7:4,22 9:6 12:2 23:12 28:4 33:9 44:1 49:7,9 52:20 65:20 71:13 103:8 105:19,20 108:17 108:19 111:22 112:2 115:14,19 131:14 179:20 180:2 190:21 195:16 247:16,17 247:21 248:2 249:1,4 257:15 277:17,19,22 278:6 279:6,21 281:12 282:9 284:21 287:10 292:17 297:8,16 300:8 303:4 309:6 309:17 312:10,12 312:17 313:14 314:13 315:12,17	315:21 317:15 318:6,11 grouper 198:14,19 groups 257:11 298:3,8,13 grouse 255:22 grouses 255:22 grower 80:17 Growers 2:3 grown 78:18 guess 31:17 37:10 39:17 50:10 59:10 96:7 156:19 187:14 191:4 197:3 213:18 220:12 223:15 263:15 272:10 284:4 289:8 301:1 301:8 304:14 306:17 307:14 316:12 guidance 103:7 255:7 258:19 263:1,2 264:8,20 266:15 267:4,12 274:2,7 276:10 293:17 294:15 guide 35:2,4 221:9 guidelines 122:7 208:10,13 gulf 3:20,24 14:17 16:4,6 17:5 18:20 18:22 20:15 35:14 46:3 50:20,20 51:4,15 77:9 78:1 79:6,19 80:6 111:5,14 112:11 195:19 197:11 198:13,16 204:3 208:1 280:10 284:13 285:11 291:9,21 308:13 gut 23:16 GUTIERREZ 2:10 guy 44:4 guys 5:7 7:19 42:15 44:22 52:6 73:1	95:9,11 105:15,21 106:19 117:20 227:10 guy's 290:12 <hr/> H <hr/> H 1:21 237:21 habitat 7:16 25:1 29:9 73:2,3,5 74:13,16 75:1,15 75:20 76:3,6 94:14 103:18 120:8 125:9 132:19,21 133:2,3 133:6 134:3 137:13 138:11,22 139:11 187:17,22 238:1 239:2 271:8 271:13 295:17 habitat-based 132:22 habitat-related 271:12 haddock 16:2,3 half 20:18 26:12 36:5 49:8 71:21 207:20 231:19 236:9 282:5 halibut 50:3 hammer 89:14 hand 40:2 52:15 131:7 140:11 142:16 145:22 160:21 196:9 221:22,22 handbook 191:2 276:10,14 297:7 297:11 handed 65:2 307:10 handle 56:22 handled 56:13 271:2 handout 10:4 hands 243:21 308:4 hang 277:17 HANSEN 2:14	happen 9:3 38:3,11 80:15 93:18 193:5 211:12 298:15 happened 15:2 145:20 149:15 152:11 179:9 189:16 238:18 299:9 happening 16:20 66:8 71:18 158:18 happens 38:8 41:5 42:4 87:11 132:14 256:2 272:15 happy 74:21 101:19 168:11 192:2 311:6 hard 6:16 23:5 106:20 114:20 116:1 137:6 150:13 151:20 152:15,19 153:10 154:20,22 156:20 159:15 160:7 167:11 189:10 193:21 206:21 214:13 222:6 224:1 harder 183:20 hardwired 50:12 harmonious 126:20 harvest 19:17 152:2 233:12 237:3,4 238:3,6 238:10,12,18,21 239:4,6,9 242:5 242:18 244:14,20 245:14,17 246:6,6 246:17 247:20 250:7,10,16 251:5 253:2 259:13,15 259:22 265:1,2 harvesters 245:20 harvesting 238:3 245:3,6 249:19 266:1 269:10 hashed 26:15 HASP 56:19,21	hatcheries 87:12 234:10,14 238:2 hatchery 236:16 243:21,22 hatchery-bred 87:13 236:22 hate 216:16 296:3 Hawaii 3:14 25:16 25:16 40:21 68:19 126:9 141:19 143:12 145:14,16 146:4,5,15 150:6 161:20 166:1 173:16 174:13 175:12,22 180:22 185:5 186:18 188:8 221:18 222:20,22 224:2 224:15 230:6,13 230:17 231:10 232:17 296:15 297:16 298:6 318:16 Hawaiian 23:16 157:14 231:10 282:21 296:5 head 10:12 55:21 167:21 191:14 headquarters 272:12 273:3,11 274:4 275:6 279:15 280:9 heads 205:14 Health 268:5 hear 44:22 94:6,7 111:9,11 141:1,3 141:6 215:19 281:4 311:6 heard 70:10 78:20 141:21 198:6 225:7 228:19 240:19 282:11,16 283:20,21 284:9 285:20 286:2 292:21 308:1 316:9 hearing 29:12 37:5
---	--	---	--	--

95:10 181:10 299:19 heartburn 29:13 47:14 63:22 heavier 86:15 heavy 225:20 Heidi 2:15 6:3 9:16 11:15 13:19 44:12 60:5 65:3,4 92:6 100:17 102:17 105:3 heightened 144:8 held 65:21 189:3 Helen 3:6 113:18 114:2 117:13,14 hell 41:19 help 9:20 13:22 24:8 95:14 164:22 183:6 187:22 195:6 198:2,3 219:11 274:21 293:1 311:20 312:19 313:1,22 helped 90:10 142:12 helpful 35:6,8 36:17 116:14 175:18 221:7 267:13 278:18 283:12 293:6 300:5 315:5 helping 5:15 herbivorous 62:7 62:17 hey 274:16 295:20 300:22 314:19 Hi 109:19 180:20 276:16 278:10 280:20 high 67:15 117:21 134:12 197:20 202:22 204:21,22 226:8 238:6 242:17 245:17,20 higher 155:11 200:15 245:16 highest 93:3,16	highlighted 8:3 131:13 highly 31:13 32:17 42:11 126:10 176:18 Hill 10:14 hindsight 216:14 hire 53:13 hired 274:5 historically 16:16 history 142:17 146:1 149:7 209:16 212:20 216:5 220:9 226:5 229:8 238:4 264:2 hit 23:15 HLA 158:1,4,6,8 181:14 184:9,16 184:20 185:1,17 297:5,13,19 304:2 HLA's 185:19 HMS 31:12,13 32:1 53:16 hoc 3:3 6:15 7:3,22 12:2 33:9 76:12 247:16 284:21 hoc-type 284:11 Hogarth 55:4 127:5 hold 12:11 holdover 102:14 HOLLIDAY 2:15 54:4 77:17 79:4 89:18 311:7 313:10 314:11 318:3 home 89:14 homework 128:14 hone 6:9 Honolulu 171:15 172:15 hook 211:17 hooks 146:21,22 147:18,22 148:5 148:14,15,18,22 150:9 174:17 210:2	hope 5:7 73:3 80:21 116:12 192:3 232:20 278:18 hopeful 195:4 hopefully 61:11 105:5 224:6 hoping 35:20 103:1 282:5 host 305:15 hot 202:2 225:20 hour 106:5,15 168:19 231:20 282:5 hours 6:9 106:6,13 108:7 116:1,1 house 226:20 housed 268:22 269:1 Hubbs-Sea 2:5 huge 19:2 212:22 Human 268:5 hundred 246:8,9 246:19 250:10 261:9 hundreds 247:5 hundred-year 246:2 hurry 212:13 hurt 44:4 hydropower 238:2 271:21 272:1,3 hypothetical 301:2 H's 239:1 H-somethings 247:4	278:8 282:6,11 286:7 310:20 identical 190:8 identified 5:20 120:21 295:10,14 identify 113:13 195:7 275:19 290:13 313:22 316:5 identifying 112:19 148:20 315:11 II 3:20 III 4:10 illustrate 148:8 imagine 225:10 immediately 203:3 204:1,17 254:9 immensely 264:6 impact 66:20 67:9 145:6 158:10 160:15,18 170:5 170:15,18,20 171:14 172:1 205:10 229:7 237:6 258:4,4 260:9 287:22 impacting 205:11 impacts 66:21 121:19 129:12 169:19 171:3 221:11 impediment 283:14 288:14 implement 79:2,13 97:9 194:2 261:5 implementation 13:17 21:7,19 22:4 45:9 79:18 80:5 305:3 implemented 45:13 78:2 80:7 151:20 211:16 219:20 294:15 implementing 51:13 153:4 168:8 important 23:7 32:13 40:4 41:1	73:18 98:3 119:19 125:10,22 143:22 144:3 154:8 161:18 167:7 175:8 202:13 215:15 236:12 244:11 248:13 252:5 258:9,17 263:12 266:2 289:13 299:22 310:4 impose 287:17 imposes 119:3 impractical 128:3 improper 57:13,19 improperly 57:11 improve 113:15 165:12 187:21 195:7 217:21 improved 116:21 164:7 165:20 175:16 180:16 183:13 275:20 improvement 184:11 187:8 224:22 261:19 281:18 288:15 improvements 113:3,6 169:16 309:22 improves 66:21 improving 239:2 inadequacy 57:15 inadequate 220:5 inadvertent 94:17 incentive 298:12 incentivize 150:11 incidental 164:2 200:20 214:6 incidentally 206:2 241:14 inclined 133:7 include 34:3 35:1 40:15 49:17 50:15 51:5 62:15 83:11 90:6,7 97:4 102:5 310:3
---	---	--	---	---

included 12:3 35:5 47:21 54:8 160:5 164:2,3 171:13 219:1	industrial 15:10 industries 175:10 industry 19:13 93:9 95:1 96:18 98:18 99:22 145:16 204:8,12 257:15 259:6 297:17	307:1 312:11 315:18 316:3,9 informed 291:13 inherent 222:3 inherently 214:20 215:2,3 initial 77:3 218:14 310:9 initials 11:3,9 initiated 152:21 155:22 156:2 initiation 120:22 121:6 158:11 injuncts 126:8,9 126:9 Inlet 132:14 innovative 313:21 input 166:3 167:19 301:11 insert 61:11 95:5 101:19 132:22 inserting 63:20 64:1 insight 241:4 insist 71:19 Institute 2:5 insured 176:12 integrate 301:11 integrated 177:17 190:11 287:6 306:13 integrative 180:5 integrity 144:7 176:17 198:5 249:16 250:4 265:21 intelligent 295:4 intended 207:19 intends 57:17 intense 227:18 intent 155:1 318:17 intentional 130:13 interact 165:15 171:2 174:21 260:6 266:13 272:12 287:20 interacting 173:18	178:13 288:13 interaction 122:9 156:14 160:13 162:5 163:19 213:15 244:14 interactions 119:20 162:13 163:17 174:19 200:12 213:22 221:14 289:18 300:16,17 interactive 129:5 interacts 108:8 Interagency 279:16 Interdisciplinary 284:14 interest 64:3 195:9 265:8 318:2 interested 207:7 257:5 300:13 interesting 19:6 44:3 181:3,13 225:4 interests 129:22 interfering 87:14 interim 211:12,15 212:1 Interior 124:8 internal 286:17 302:8,20 internally 126:16 303:20 international 1:22 31:3 59:6 60:3 165:8 internet 305:16 interpret 54:21 interpretation 53:9 277:6 287:9 interpreting 291:15 intervention 89:19 90:12 318:4 intra 144:4 intra-agency 302:10 introduce 108:12 109:4,7 110:5	111:19,21 113:17 140:13 142:1 143:6 279:6 introduction 3:5 11:5 142:2 introductory 113:10 114:7 196:16 invalid 133:13,17 invest 36:5 74:4 investment 43:19 involve 129:5 301:10 involved 41:11,12 41:20 42:11 91:19 130:13 144:10,17 160:7 176:18 178:17 179:12 186:21 188:22 213:11 221:20 222:16 241:16 244:13 248:22 257:10,16 258:19 260:18 262:14 265:2,4 269:19,22 270:16 282:18,19 283:4 287:4 292:22 300:8 involvement 213:11 267:20 involves 259:21 277:1,5 involving 155:11 169:7 213:10 in-river 259:12 IPT 203:8 284:13 285:8 Ishizaki 109:19,20 Island 139:9 140:19 188:3 islands 3:17 78:11 109:13 111:16 141:16 146:17 172:14 196:14 225:17 issuance 267:1 issue 15:14 17:4
--	---	--	--	---

18:2,19 19:11	212:6 254:4	joked 239:20	kept 159:12 253:14	50:13 51:11 52:12
22:11 28:9 32:13	309:18 310:8,18	JOSH 2:19	270:20	54:18,20 56:4,22
40:8 63:16 69:10	310:19 311:5,12	journals 65:14	Kevin 3:23 111:7	59:17 61:18,21,22
70:10,14,18 78:3	313:6 314:4,10,13	205:8	111:10 112:11	62:6,21,22 63:1
78:10,17 94:16	315:6,12	judge 265:16 297:4	123:3 195:20	64:16 65:13 67:13
138:21 155:17	jeopardize 120:7	Julie 1:19 2:2 14:14	196:2,4,6,9	76:3 77:7,9 84:3
171:14 181:11	125:6 137:12,16	34:14 37:9 47:12	215:17 222:5	85:7 87:3 93:11
191:6 193:19	jeopardizing 152:5	52:5,5,11 53:1,2	227:8	94:4 95:1 105:20
194:8 197:12	jeopardy 3:4 108:8	58:9,11,11 59:9,9	Kevin's 228:9	109:4 112:2 114:8
200:9,10 201:21	121:21,21 124:4	59:22 60:19 64:14	key 66:22 151:8	114:12 115:5
202:2 206:11	124:12 125:11	65:4 68:5 89:3	244:19 257:13	118:1 120:11
225:6 245:21	127:4 131:14,22	104:14 111:12	306:13	122:1,2 128:7
274:19 283:3	132:5,16 149:11	114:3 123:1 196:2	killed 229:9	164:10 182:20
286:10 288:4	149:14,21 150:12	279:8 311:7 312:2	killing 229:11	187:10 192:1
293:17 297:3	150:21 151:1,3	Julies 48:6	kind 12:11 30:19	209:17 225:18
299:6 308:17	153:2,21 162:20	jump 70:1 192:10	32:12 37:13 39:15	230:20 234:3
issued 149:20	165:17 170:17	240:18 241:13	51:6 108:16 117:5	240:3,5,18 244:1
153:1,20 155:4	171:10,10,18	junction 193:4	126:19 170:7	245:2 258:8,9,9
172:5 201:14	172:2,17,18 173:9	junctions 176:7	190:1 194:17	258:13 259:1,4
249:4 254:16	173:13,19 174:5,9	185:7 186:20	198:5 200:2 221:2	260:12 261:10
275:17	177:17 182:11,11	June 90:8 152:13	223:2 224:6 228:7	263:2,4,12,16,22
issues 24:8 33:7	185:11 212:5	154:3,17 156:18	236:18 241:9	264:4,10 265:9,15
57:21 58:13 61:8	219:5,13 221:1,3	206:12 207:13	252:22 267:3,3	268:3,16,19
65:21,22 76:12	221:10 224:11	208:4 209:6	269:19 277:18	270:22 271:5
100:17 101:8	229:4 230:3	juvenile 19:16	278:4 279:7	272:6,13 274:6,10
102:15,20 103:1	239:11 240:22		283:15 286:9	274:15,15 275:1
117:15 122:9	262:10 264:21	K	289:20 294:13	276:8,12 281:12
178:4,7 181:8,9	283:10 293:13,14	KATIE 2:18	297:21 303:17	286:15 288:7,7,11
195:6 198:5 199:4	294:8	keep 26:1,5,8 53:4	306:21 309:20	288:12,15 289:1,7
214:16 219:3	Jim 2:16 177:22	86:4 88:17 95:9	310:9,19 313:7	289:21 292:16
220:6 223:20	185:20,22 190:3	97:5,8,10 115:20	317:1	293:7 295:7,14
253:1 257:8	192:16 193:20	116:6,22 117:5	kinds 126:12 270:9	297:5,7,14,20
273:14 278:22	280:20 286:8	302:20 304:4	274:7	298:7,21 300:4,15
308:10 315:2,4,8	296:15 300:3,22	keeping 24:9 65:21	Kitty 192:15	300:18 302:2,10
316:14,14	314:21 316:11	115:3 290:12	knew 168:3 204:20	302:13 303:2,4,5
italics 72:14	job 113:13 187:18	291:13	206:3	303:12 304:16,21
item 33:1 159:20	jobs 81:17 90:2	Keith 1:14,17 8:3,7	know 5:6,9 18:12	305:10 306:8,9
items 160:5 228:10	John 290:9,10,14	33:6 75:1,8,15	18:13,16 22:13	307:13 308:9,14
310:3	Johnson 3:10	86:17 103:16,22	23:12,18 24:2,8	311:15 313:11
iterations 246:1	113:20 123:11	104:17 105:15	24:11 26:10,11	315:22 318:18
It'd 266:10	136:15 138:14	180:19,20 222:9	27:18 28:20 31:5	knowledge 72:3
it'll 298:15	139:2,5	223:19 272:8	31:18,20 32:8,14	known 102:2
	join 103:6 319:2	291:15 298:19	32:21 36:7 37:16	202:12 237:20
J	joined 216:2	Keith's 76:7	38:2,19,20 39:14	239:13
J 1:25	joining 109:4	Ken 2:1 10:11,13	41:3,6,12,19,22	knows 255:17
January 153:6	joint 311:8	51:22 52:5 53:2	42:3,9 43:7 44:9	263:6
205:15 206:6	jointly 308:18	58:2,13 103:5	45:15 47:6 48:9	Kodiak 139:8

Kudos 278:15	235:17	132:10 149:22	214:3 229:6,12,13	link 57:20
L	larger 14:20 46:7	150:15,18 153:22	229:15 239:7	linked 155:10
labeled 129:18	46:14 128:15	154:21 156:20	279:5 282:10	lion 139:12
labor 79:15	199:1 260:8	189:9	313:20 317:3	Lisa 3:15 109:12,15
lack 18:3 156:13	largest 146:4	leave 29:15 34:7	level 45:8,9 60:13	140:17 141:5,13
220:8,8	laser 27:11	48:21 51:21 52:4	74:5,6,9 103:14	143:9 146:3
lacking 79:17	lastly 116:12	73:10 114:4 214:4	117:21 118:10,21	160:21 166:10
169:20 220:16	last-minute 5:10	215:10	119:3 131:16	175:1 177:21
226:17	late 41:19 121:3	leaves 45:12	132:18 197:20	181:4 182:19
laid 196:18 197:15	147:6 159:17	leaving 94:4	200:11 209:21	192:10 194:16
224:7 229:5	199:17	led 13:6 14:7,9	227:13 256:17	198:6 225:15
landings 12:15	latent 209:18	136:10 241:8	262:8 267:12	276:16
15:18 209:16	latest 7:20,22	247:11 250:8	268:8,9 272:16	list 31:6 33:7 59:22
landmass 169:19	laundry 261:8	left 16:14 20:21	294:16 295:3	60:8 76:11 102:19
language 7:18 8:2	LAUREL 2:12	31:7 51:19 106:8	levels 48:14 150:11	110:3 132:20
8:11,16 10:21	law 1:18 81:22	215:18 218:3	200:16 204:22	134:5 158:16
21:4 25:19 26:13	89:15 93:2 119:19	221:2 236:9	268:7 277:12	295:8 310:3,10
30:5 34:2,5,12,16	181:5	legacy 261:12	liability 173:3	316:13,17,18
38:16,17 39:14	lawmakers 83:12	legal 115:11,17	life 212:20 226:5	listed 120:7 121:19
40:1 44:14 47:18	laws 56:22 78:12	181:7 189:18	229:8 264:2	131:19,22 132:7
48:10 58:16 60:4	88:5,15 89:11	291:7 292:5 307:2	light 215:22	132:13,17 135:2
60:15,16,17 61:1	96:6	legally 116:3,8	limit 119:4 136:5	152:6 221:4 229:5
61:11,16,22 64:22	lawsuit 230:18	176:15	151:13 152:16	229:17,21 234:15
66:18 67:4 72:19	lay 119:2 120:3	legislation 80:14	168:16 302:17	236:14 237:10,12
74:20 76:13,13,15	196:13	83:13 84:6 85:2	limitations 118:18	237:16 255:9,12
81:5 82:20 83:2,2	layer 148:19 149:1	100:2	196:12 295:13	listen 231:21 233:7
83:3 84:4,11,22	lead 6:10 227:5	legislative 77:6	limited 13:7 14:11	listening 111:18
85:21 86:4,14	252:16	80:10,16	20:17 27:9 37:17	195:12
87:3,18,20 89:1	leadership 5:15	length 253:10	119:9 147:20	listing 132:11
89:10,13 90:3,20	252:7 316:12	lengthy 55:8	167:22 174:22	155:18 238:5,8,10
91:9,16 93:1,7,15	leading 224:16	lesson 175:19 176:9	208:2 298:5	listings 240:5
94:19 95:3,19	leads 223:2	179:9	limiting 210:2	literature 163:5
96:2,8 98:13,20	leaning 263:16	lessons 169:13	237:22	litigation 125:1
100:5 102:6	leap 253:4	178:3 196:9	limits 18:8 48:4,6,7	149:17 153:7
103:16,17 104:11	learn 142:12 179:9	213:17 240:4	154:5 155:4,12,15	173:21 183:19
105:2,7 106:10,12	293:22	264:17 294:1,20	159:10	204:22 231:2
126:19 269:11	learned 169:14	316:5	LINDA 2:13	291:3 292:12
lapses 38:7	175:19 176:10	letter 255:4,13	line 36:7 56:21	293:8 298:1
large 16:6 17:2,8	178:3 196:9	256:1,8 262:9	95:11 96:4 169:5	litigious 176:19
19:17 68:20 150:8	213:17 240:4	263:1,2 264:20	170:16 179:4	little 7:7 25:9 44:4
174:17 202:21	264:17 272:14	266:15 267:5	198:22 199:1	44:5 47:6 60:18
205:11 208:1	294:20 316:5	letters 191:16	200:6 206:16	63:8 97:13 101:12
216:19 237:7	learning 221:17	letting 194:14	243:9 294:12	106:13 108:9
273:14	lease 80:11,17	261:7	linear 128:21	146:1 154:14
largely 128:11	leases 78:4,18	let's 27:11 45:1	linearity 127:8	175:3 193:15
188:19 234:8	leatherback 170:22	85:8 106:10 107:1	lines 146:10 198:11	196:7 202:3
	leatherbacks 132:7	123:7 212:16	282:6	207:15 212:12

216:22 218:5	198:21 199:2,5	13:12 22:22 23:5	mackerel 150:9	94:13,15 96:2
222:14 224:10	200:5,6,17 202:6	23:5,5 26:15 37:8	174:18	97:17 119:13
225:16 226:2	202:20 204:4	47:20 50:19 51:3	MacPherson 3:8	135:15 137:20
234:5 241:3 243:8	206:15 209:14,19	51:10 61:18 62:5	112:8 113:22	167:12 186:19
244:17 247:13	210:4,7 220:6	66:10 73:13 103:2	117:13 119:1	194:20 195:9,14
262:7 277:20	221:18 223:20,22	109:1 127:3	184:7 186:1 227:7	221:2 259:8
287:21	296:5,16	142:12 161:11	280:6,7 285:19	278:17 287:20
live 140:22 280:9	longliner 93:13	177:13 186:11,17	290:19 304:8	294:8 304:6
LLC 2:2	long-term 151:11	196:15 198:22	MAFAC 2:6 7:1	MALE 83:19
loan 93:12	look 9:22 40:22	205:12 209:17	51:7 54:5 65:6,16	mammals 271:18
local 15:22 129:13	55:3,17 75:15	213:6,7 215:10	65:20 70:7,9	manage 221:15
308:7	76:7 101:7 102:19	216:4 218:3	73:13,15 86:12	242:8 266:8
loggerhead 132:6	104:21 105:6	225:10 226:13	87:1 112:4 231:5	managed 80:12,18
151:19 155:18	116:5 122:12	227:4 228:6	277:21 278:16	270:18,20
156:3 160:7	128:1 139:9	229:12 236:11	279:8,18 280:3,5	management 3:8
200:21 202:13	147:15,16 160:12	240:6,9,10 242:10	281:11 311:9,19	3:19,25 4:14
205:1,3 206:22	170:4 183:20	244:13 248:20	312:7 316:12	25:22 31:3 33:16
216:9 219:16	219:18 220:2	252:20 253:1	318:4,7,12 319:1	34:3,20 35:1,5
loggerheads 82:4	229:6,12,13	274:13,20 276:19	magnitude 256:17	40:14 42:18 45:14
132:9 149:22	230:10,14,22	277:5,11 278:17	Magnuson 37:14	49:17 50:21 59:5
150:15,17 153:11	241:8 257:22	307:22 316:21	115:11 117:16,22	59:13 74:16,18
153:22 154:21	275:10 276:13	lots 178:15 218:8	118:4,17 119:3,9	78:2 79:9,19 80:4
156:20 162:17	278:21 290:22	265:6 300:18	120:6,14 121:8,9	106:3 109:18
167:11 170:21	305:20 314:3	307:1	126:21 166:13	112:21 113:22
189:9 202:1 205:9	looked 163:4	loud 14:4	190:5 194:4,8	114:11 116:18
205:12 224:13	206:17 249:15	love 9:13 42:15	206:8 211:5 214:9	117:12 118:4
229:20 231:1	looking 24:2 36:9	LOVETT 2:15	307:3	143:17 144:14
logical 122:9	40:11 50:18	99:14	Magnuson-Stevens	145:10 151:5,6
logistical 122:17	112:22 113:2	low 134:13 218:7	194:14	160:9,14 166:12
logo 244:22	120:11,19 121:2	245:14,19 258:6	main 131:13	166:14,20 167:10
long 22:18,18 41:6	139:7 162:3	lower 4:10 232:7	135:22	167:14 168:8
86:10 114:20	180:14,14 187:7	234:8,11,12 237:9	Maine 14:17 15:21	169:10,11 176:19
122:4 146:13	208:15,16 211:4	lowering 102:8	16:5,6 17:5 18:5	182:21 192:20
175:3 216:4	216:14 221:12,20	lunch 10:16 97:19	18:21,22 19:1,13	199:11,16 201:15
229:13 231:15	224:19 228:20	102:21 107:2	20:5,15,19 35:14	213:13 214:3
257:5 260:19	250:21 255:18	lunchtime 95:8	46:3	219:8,12,19
270:19	281:17 299:11	Lynch 177:21,22	maintain 46:19	224:20 228:3
longer 46:5 193:22	307:15	185:20 190:2,3	185:1	233:2,3,13 237:3
220:8	looks 28:12 72:2	194:16 280:20,21	maintaining 144:7	238:13 239:6
longline 3:14	loop 294:21	281:3,7 286:8,8	maintains 176:16	242:4,6,14 243:13
141:20 142:17	loosey-goosey	288:1 289:8	major 29:13 41:5	244:7 253:21
145:14,16 146:2	308:6	296:14,15 300:3,3	47:13 126:7	254:7 260:18
148:10 151:6	lose 128:16 245:16	301:15 304:14	147:17 169:15	261:1 264:19
157:15 166:2	260:7	306:7 314:19,21	205:8 230:6	265:1,3 266:5,12
170:20 173:16	lost 16:7,21 35:18	314:22 317:7	237:21	268:22 269:2
174:12 175:12,22	48:1 185:21		Makah 248:9	271:3,13 281:19
185:5 186:18	lot 6:18 11:18		making 10:9 27:8	282:2 285:10,14
		M		

301:6	113:11 195:15	medicine 268:6	52:10,17 53:21	192:5,12,14
managers 74:15	312:9	meet 37:22 38:1	54:22 55:2,19,20	195:11 207:16,19
249:8	math 244:3	39:6 96:9 97:10	56:17 57:4 58:1	215:17 222:5
manages 234:17	matrix 171:22	106:1 198:10	58:10,17 59:1,8,9	223:13 225:1,3
260:12	matter 43:8 107:3	216:16 267:10	59:10,21 60:20	227:6 228:17,18
Managing 311:12	123:19 209:8	273:6 308:16	61:6,14,15 62:12	230:5 231:4,14
mandate 43:11	232:2 266:19	meeting 1:6 8:10	62:19 63:10,11,15	232:4,13,15 248:2
124:7 125:2	279:1 282:16	25:15 26:11,12,17	63:21 64:6,14,15	261:18 262:3
mandated 93:16	319:8	26:17 27:10 49:10	65:1,3,5,12 66:3,6	267:14,16 270:14
289:15	matters 179:21	55:4 104:5 108:6	66:15,16 68:4,13	272:4,8 277:13
manner 179:8	236:17 260:3	112:1 154:17	70:22 71:3,5,6	278:15 279:4,9,18
manual 257:6	mature 249:6	156:18 157:1	72:8,22 73:11	279:19,20 280:1,3
map 202:4 234:5	maximum 134:18	159:21 183:12	74:22 75:5,8,13	280:4,5,11,15,18
234:11,21 311:22	MCCALLUM 2:16	203:17 204:6,17	75:17,22 76:2,4	281:1,5,9 283:17
March 153:2 254:7	McIsaac 269:17	206:6 207:13	77:2,15,21,22	283:20 285:7,18
255:5,18 264:12	mean 11:21 27:15	208:5 209:7,7,10	80:9 81:2,9,11,12	288:18 290:6,10
marginalization	32:5 54:1,13	216:10,15 217:6	82:5,7,8,11,15,17	290:16,18 291:8
169:2	59:18 64:8 67:11	253:9,13 254:6	83:5,9,14,16,17	292:16 296:2,3,7
marginalize 167:15	91:13 164:9	263:17 281:12	83:21,22 85:3,4,8	298:17 304:3
marginalized	189:15 229:20	308:14 310:19	85:10,11,13 86:17	307:15,21 309:2
189:21	261:2 276:8 295:3	313:6,12,13 314:4	86:18 87:22 88:2	313:4 314:2,17,20
Marian 3:8 112:8	297:20 299:8	314:5,9 315:6	89:2,6,8,9,16	315:13 316:11
113:22 114:5	303:16 306:12	316:4 317:2	90:15,18 91:11,15	317:8,12 318:20
116:6 117:10	307:9	meetings 5:5 53:22	91:18 92:6,9,10	members 1:16 12:1
123:13 127:17	meaning 23:9	55:6 231:10 252:8	92:12,14,16,18,20	24:17 86:13
128:5 136:2 184:6	129:11	meets 39:13	92:22 93:21 94:2	111:22 112:3
225:2 227:6 280:6	meaningful 176:7	meltdown 126:7	94:5,6,20,22 95:7	159:22 204:8,9
285:18 288:18	means 48:16 58:4	member 6:13 10:13	95:21 96:3,11,13	217:5 220:17
290:18	161:16 222:2	10:17 12:13,18,21	96:17,19,20,22	248:7,8 277:16,21
Marian's 304:6	247:3 258:2	12:22 13:13,15,18	97:1,3,13,18 98:1	277:22 279:7,21
marine 1:4,25 2:8	264:20	13:21 14:1,5,9,13	98:5,7,9,14,17,19	281:13 284:15
108:5 112:6	meant 189:17	14:14,15,17 17:22	98:20 99:9 100:8	311:9 312:10,17
244:15,21 263:14	measured 15:10	19:10 21:15 22:1	100:13 101:13,14	314:6
265:9 271:18	87:3,18	22:8 23:20 24:1	101:17 102:11	membership
mark 2:15 23:13	measures 25:1	24:14 25:5,8 28:3	103:20 104:13,15	247:22 312:4
53:21 77:15 89:17	143:17 165:21	28:11,13,17 29:12	105:1 106:14,16	memories 30:8
91:6 105:15 110:2	199:18 201:15	30:4,12,15,20	106:19 108:3	memory 48:5 54:11
146:10 311:5	209:13 210:5	31:2,7,9,11,13,16	109:15 110:2,10	209:20
313:4	212:2 219:12,19	31:17,22 32:3,7	110:13,19 111:2,9	memos 291:1
market 43:13	221:10 222:1	33:2,3,12,13	111:13 112:16	MENASHES 2:17
49:20 51:2 56:14	267:6	34:11,14,15 35:10	123:2,7 138:5,9	Menashes's 312:4
Maryland 1:13	meat 123:18	37:3,10 39:22	138:20 139:3	mention 219:4
mass 17:11 311:18	124:20	41:2 42:9 44:12	140:8,16,19 141:7	276:18
mastered 309:6	mechanism 36:14	44:16,21 45:3,5	141:10 180:7	mentioned 8:7
matches 130:19	50:14 59:19	46:1,2,21 47:5,9	182:5,6,15 184:6	122:19 148:11
170:13	mechanisms 49:20	48:20 49:14 50:10	184:15 186:6	156:17 159:6
materials 15:17	51:2	50:19 51:16,18,20	187:6,9 188:6	166:22 168:14

184:11 187:11 217:5,12,16,22 236:13 248:14 252:4,13 259:9 264:19 273:9 275:4 286:5 mess 95:4 message 66:22 messaging 226:4 met 1:12 250:19 meters 148:17,20 methodology 251:14 257:6 methods 113:5 169:15 180:15 182:8 223:6 268:13 281:22 metric 138:12 187:14 Mexico 3:20,24 10:14 50:21 51:4 51:15 79:7,19 111:6 195:19 198:13,17 291:9 308:13 mic 142:3 Michelle 34:16 49:3,11 81:6,16 81:18,19 82:3 Michelle's 82:22 96:4 microphone 14:8 14:12 22:2 25:4,7 28:16 30:11,14 31:1,15,21 32:2 44:15,20 45:4 46:20 47:4,8 48:19 65:11 75:2 90:17 99:16 100:3 100:7 101:16 103:19 109:11 136:14 140:15 196:6 mid 210:21 middle 39:6,13 Midway 147:7 Mid-Atlantic	111:15 mid-coast 20:19 mid-1950s 146:13 migrants 146:5 migrate 235:1 migratory 31:14 32:17 126:11 260:22 mile 19:22 miles 16:1 17:10 146:8 234:22 million 36:5 146:22 mind 8:18 23:4 26:6,9 86:5 115:3 192:9,10 309:15 mindful 23:18 90:13 mine 214:18 286:7 minimize 160:13 174:19 204:3 minimizing 221:11 minimum 121:1 251:18 minor 6:2,4 198:17 minute 30:7 206:20 278:5 minutes 55:17 58:7 100:15,16 103:3 106:7 138:6 180:10 207:17 215:18 216:15 231:18 307:17 mirror 10:6 95:19 misinformation 86:7 misinterpretation 190:13 misquoting 226:2 missed 180:22 missing 17:1 58:20 84:8 103:18 mistake 242:14 mistaken 232:18 misunderstand 228:22 misunderstanding 301:13	misused 88:3 mix 261:3 mixed 198:18 212:16,17 MLE 90:21 model 158:9 159:1 159:1 162:18,19 162:22 165:4 167:20 168:1,4 171:16,17,22 172:1,16 173:1,3 182:13 183:7,22 207:3 212:13 222:12 228:7 241:14 246:7 253:15 269:5,7,7 269:10 282:21 294:3,9 modeled 245:22 modeler 241:18 248:15 252:14 268:20 modeling 151:17 225:6,13 240:10 241:22 245:22 249:22 253:12 269:6 models 169:17 170:8,14 171:22 177:11,14 182:10 183:9,12,15 184:3 223:7 225:9 226:4 226:17 293:12 moderate 87:4 moderates 243:1 modification 133:8 137:17 modified 150:22 modify 120:8 125:9 137:13 152:18 moment 32:11 130:21 money 41:17 43:1 266:6 month 200:18 months 36:10 201:17	morning 5:3,5,13 9:10,12,13 52:2 58:6 72:20 75:4 75:16 76:6,9 101:7 102:15 104:16 105:14 143:11 307:3 317:19,20 318:19 318:21 Morris 2:2 34:15 50:19 60:20 62:12 65:5,12 104:15 108:3 109:15 110:2,13,19 111:2 111:9,13 123:2,7 138:5 140:8,16,19 141:7,10 180:7 182:5,15 184:6,15 186:6 187:6 188:6 192:5,12,14 195:11 207:16,19 215:17 222:5 223:13 225:1 227:6 228:17 231:14 232:4,13 232:15 261:18 262:3 267:14 270:14 272:4,8 277:13 278:15 279:4,8,20 280:11 280:15,18 281:1,5 281:9 283:17 285:7,18 288:18 290:6,10,16,18 291:8 296:2,7 298:17 304:3 307:15 309:2 313:4 314:2,17,20 315:13 316:11 317:8,12 318:20 mortalities 226:16 mortality 137:4 162:14 210:6 224:18 motion 82:21 MOU 284:16 mouth 235:1	move 29:15 31:5 47:15 71:4 72:10 75:6 89:4 90:18 94:21 95:8 98:9 100:16 115:4 138:7 140:9,12 180:10 195:17 278:22 310:9 312:14 moved 77:10 154:12 156:10 204:17 214:9 movement 99:12 moves 100:5 115:14 moving 33:5 48:3 60:5 73:2 76:10 81:3 91:4 98:8 135:7 152:15 203:2 224:7 MRIP 57:8 MSA 3:5 108:8,12 281:19 282:2 MSY 18:7 multiple 250:1 266:6 multi-page 255:13 <hr/> N <hr/> name 285:22 NARDI 2:2 77:2 82:17 83:14,17,21 narrow 119:14 213:2 national 1:1,22 45:8 71:12 98:21 112:6 119:17 244:15,20 263:14 265:9 272:16 273:14,14 274:2 276:4,11 293:17 294:14 nationally 276:8 national-level 293:16 294:15 Nation's 311:13 Native 308:9
---	---	--	--	--

naturally 236:21	needing 78:14	niche 36:11	non-NOAA 267:21	214:11 215:6,7
Nature 1:24 65:14	needs 19:7 21:1	nitty 114:5	non-publically	219:7 221:3,6
Navy 68:18 226:12	45:16 86:11	NLAA 131:6	304:10	223:11 246:14,18
na'au 23:15	129:22 190:4,6	NMFS 162:21	non-tribal 259:22	260:8 313:13
near 26:19	285:16 292:6	178:11,19 190:5	260:1	numbers 138:12
nearly 251:21	negative 30:18	190:12 191:4,5,14	north 17:10 110:7	156:19 161:17
near-shore 146:7	neglected 61:3	191:17 196:8	110:10,14,15	163:22 164:2
neat 286:2	196:17	203:10,11 205:15	112:14 126:10	165:3 189:1
nebulous 139:22	NEPA 119:20	211:13 216:7,22	146:16 170:21	210:11 222:20,22
necessarily 11:20	128:2 129:12	220:19 226:11	224:15 233:14	223:7 241:4,7
18:3 27:15 37:7	145:4 149:21	234:10 278:13	234:19,20 235:2	242:9 256:15
39:3,20 47:22	193:3 214:20	284:15 303:9	235:12,20,22	numerous 71:11
59:17 186:16	nesting 165:3 170:1	304:17,17 305:8	262:13	230:8
192:22 197:5	170:10 171:4	NMFS's 306:9	Northeast 225:18	nursery 19:15
228:22 261:14	187:13 202:16	NOAA 2:9 9:19	northwest 87:11,16	NWR 4:12
292:3 300:19	205:3 218:20	17:20 25:14 26:7	229:22 233:1,3	
302:12	229:15	48:15 54:13 59:12	237:12,16,20	O
necessary 24:12	never 19:2 43:2	65:16 68:22 73:20	239:14 240:6	object 18:13,15
89:1 136:5 217:10	66:6	73:22 77:8 78:19	248:1,2,6,10	objected 34:16
218:16 240:22	new 2:2 7:15,18	79:2 80:13 83:12	253:21 255:12	objection 88:21
258:4 309:12	15:8 19:14 24:4	84:16,19 88:15	260:16,17,19	objective 176:14
need 5:22 6:4 9:12	24:16 30:7 35:22	89:21 90:4 93:12	264:18 271:7,10	240:21 242:9
17:13,16 38:18	37:6 40:6,12,16	99:7,10 102:7	271:15 275:14	245:1 267:11
39:1,7,9,19 41:21	40:20 42:13 44:1	104:7 109:14,17	294:3	objectives 251:14
42:8 54:20 56:15	47:3 48:8 51:2	110:15 111:4	note 115:9 188:20	263:18 283:8
65:17 67:18 68:9	60:4,15,16 61:1	114:14 121:13	210:14	obliges 125:3
71:7 86:2 89:19	63:5 70:8 73:3,9	142:5 144:5,17	noted 192:6	oblique 16:22
95:2 99:6 102:20	73:12,15 93:9	145:7 153:7,15	notes 11:3 12:19	observation 182:3
105:8,21 121:16	97:5 105:7 111:15	154:3 155:16	55:16 73:13	264:16
163:14 167:15	112:16 122:3	165:15 166:16	notice 79:21 159:19	observational
177:2 190:15	133:19 137:1	169:4 172:10	182:9 308:20	268:10
225:9 227:1	149:20 151:20	175:4 176:12,22	notified 203:18	observations
242:11 259:2	153:10,20 154:4	181:13 183:8	notion 43:9,20	283:15
260:20 283:9	154:20,21,22	184:5 196:22	45:12 260:22	observed 200:22
287:19 290:3	155:17 156:15,16	223:4 230:9 268:1	November 252:11	202:6,9,19
291:6 295:14,16	159:10,15,20	268:2 269:19	NRC 225:22	observer 161:15,21
295:22 304:15	162:15 168:1,8	270:8 272:20,21	nullified 151:5	162:6 163:22
305:1,3 307:9	183:4,14 189:9	279:11,15 284:1	number 15:12	200:14 201:1
311:1 317:18	193:6,12 201:12	284:22 285:6,13	20:21 27:6,8	217:19 218:7,9,13
319:4	201:19,20 203:18	286:15 293:19	59:13,14 65:22	218:18,20
needed 7:15 13:9	206:22 212:13	298:6,21 308:15	99:4,5,6,10 102:8	obtain 169:15
14:20 17:4 85:21	233:12 263:8,10	309:5,9	102:9 144:11	268:14
86:6,10 95:6	263:20,20 274:2	NOAA's 53:8	148:6 151:10,11	obviously 114:19
169:5 193:11	newly 205:10	104:12 143:2	162:8,10 163:17	165:17 230:13
194:1,2 207:6	NGO 204:12	noise 277:20	174:20 193:21	237:1
218:19 221:1	NGOs 204:7	nonexistent 93:8	204:6 205:11	occur 20:10 121:7
241:2 308:15	Nice 111:11	93:20	210:2 213:18	256:1 259:21

260:5 305:1,2 occurred 194:12 296:20 occurring 20:9 223:8 occurs 140:5 254:7 ocean 21:10,22 22:7 60:10 62:1 63:4 64:10,18 65:8 66:9 69:22 70:12 72:15 103:10,13 104:3,7 234:4 235:12 258:6 260:1,7 OCEANIC 1:1 oceans 60:12 101:2 October 1:9 27:4 152:22 155:3 201:13 203:17 204:6 210:21 312:5 odd 179:18 297:15 297:21 odds 138:3 offer 21:4 64:22 192:11 282:15 307:1 314:22 315:2 offered 21:5 office 3:6 109:13 113:19 141:17 196:22 221:22 273:15,15 277:1 279:12 280:7 293:17 313:1 offices 278:13 293:18 official 2:15 127:11 officio 292:17 offline 54:15 97:19 offset 259:4 offshore 13:7 14:10 146:8 OGC 299:4 oh 11:1 13:21 16:17 23:16 31:13 45:3 66:3 72:1 92:14	92:20 140:20 232:13,14,15 233:15 262:4 okay 10:10,17,22 12:21 22:1 27:22 29:16 31:2 33:4 45:3 47:13 48:3 48:18 52:8 59:2 60:5 61:14 72:18 73:1 75:5,8,13 76:2,4 81:3 82:7 82:15 85:13 88:1 89:2 91:1,2 96:11 97:1 98:5,8,19,20 100:13,15 101:13 106:1 108:3 109:9 109:16 110:2,7 111:17 112:18 119:1 123:7 140:13 141:10 180:7 184:15 186:1 187:6 188:6 192:5,6,15 195:11 207:18 215:16 229:9,19 231:14 232:4,9 261:18 272:4 277:13 279:4,20 280:19 290:6,8,17 299:5 307:15 314:2,17 317:6,7 Okinawan 146:5 old 48:10 168:11 242:7 243:13 291:1 omitted 128:15 once 9:14 128:6 162:12 252:11 262:6 306:5 ones 41:12 98:4 114:20 122:18 135:2 215:15 234:17 257:19 294:2 one's 71:7 ongoing 61:20 187:21 193:9	online 182:17 onset 33:17 42:7 172:2 op 157:12 Opay 140:14 open 11:21 45:12 53:4 84:11 97:21 115:3 142:20 214:20 215:2 251:9 252:7 254:22 opened 256:7,13 opening 117:10 260:22 299:19 operating 16:12 117:19 150:5 153:10 203:9 210:22 operation 46:15 operational 35:9 122:6 208:10 operationalized 150:8 174:15 operators 53:13 198:22 199:2 opinion 51:14 63:9 71:17 78:21 82:21 145:12 149:9,20 150:2,19 151:16 153:1,9 154:2,13 155:10,14 157:8 158:15 159:2,7 162:18 163:3,13 164:4 165:18 167:21 170:1 171:10,18 172:4 173:4 176:11,14 178:18 185:15 187:4 189:4 193:22 194:12 200:19 201:2,14 203:5 205:21 206:2,19 210:21 212:4 214:5 215:1 221:5 238:15 239:10,12 253:18 254:17,19 263:3,9	263:10 264:22 265:18 266:9,17 267:1 270:2,5,9 270:22 275:9 276:4,5 277:5 283:2 288:21 289:19 295:6 296:17 300:7 301:4 305:9 opinions 22:18 114:10 133:13 143:17 152:12 168:13 169:18 171:7 173:13 174:9 178:14 180:16 183:12,22 184:21 224:13 253:10 270:17 273:13,21 277:9 282:1 287:3 288:8 288:16 295:11 297:19 298:11 302:6 316:20 opportunities 312:1 314:1 opportunity 87:17 93:9,19 141:22 152:2 178:19 181:5 191:8 266:20 289:13 293:11,16 294:20 295:9 311:17 oppose 27:21 opposed 117:3 132:15 138:2 157:18 268:1 opposition 27:16 option 23:12 250:13 options 287:9 303:3 315:10 order 66:4 112:19 177:3 236:18 261:4,5 283:9 310:14 orders 256:17 261:5	Oregon 234:21 237:17 248:7 organization 69:16 264:17 organizations 31:4 59:5 169:11 organize 265:11 312:20 organizing 309:21 original 7:12 25:11 34:20 54:4 60:16 60:17 76:13,14 81:4 83:2 85:16 86:13 88:11 90:20 91:9 150:22 153:12 155:14 originally 33:11 48:17 146:6 Oscillation 165:6 173:7 OSF 291:1 ought 263:17 outcome 246:6 250:6 outcomes 182:2 218:1 outline 10:5 outlined 7:9 output 246:10 outputs 295:22 outreach 176:5 252:7 outset 201:6 outside 67:14 194:6 285:2 outstanding 8:1,22 249:1 overall 99:8 101:2 210:9 213:3 220:4 221:12 223:11 229:8,11 overarching 57:2 overcapitalized 44:8 overfished 18:20 overfishing 48:14 102:1
---	---	--	---	---

overlaps 56:19	panel 251:12	276:13 285:16	93:22 184:2	163:21 205:6
overtly 295:10	paper 8:18 315:3	313:12	pay 43:18	209:21 210:7,8
299:1	315:10 316:22	particularly 20:4	paycheck 245:19	218:8,16 235:9,10
overview 10:8	papers 71:22 205:7	123:16 124:2	245:20	235:14,15,18
108:10,11 142:3	316:2 317:5	126:14 153:11	PBR 136:13	236:1,3,7,9 238:7
ownership 80:18	paragraph 19:8	176:10 199:14	PBR-style 136:9	238:9,14,16,19
owner-operator	30:13 33:4 101:9	202:14 215:11	PDO 165:6	243:10 250:9,13
15:6	101:18	260:10	peace 12:11	250:15,16 258:3
owns 56:1	pardon 160:3	parties 175:17	peak 146:12	258:13,15 260:4,6
O-F 3:1	parking 37:8	176:18 179:11	peaked 146:20,21	261:9
	part 68:15 88:12	181:10 189:1	peer 68:8 72:1	percentage 99:7
P	114:22 118:8	288:13 300:8,13	268:6,12	242:21
Pac 78:16 127:22	129:15 160:6	300:13,19 306:15	pelagic 143:13	perception 17:20
178:1 179:15	178:11 186:3	315:5 316:9	148:10 223:20	24:18 265:13,15
231:6 280:22	195:14 200:8,8,10	parts 128:9 211:16	pelagic's 166:21	perceptions 97:15
pacific 2:8 3:17,18	203:8 204:11	233:17	Penobscot 1:18	period 22:7 84:19
4:19 32:11 78:11	233:8 235:11	party 175:8 189:2	16:8	149:17 200:19,21
79:8 80:21 87:11	237:2,4 249:20	pass 80:14	people 5:11 8:17	211:12,15 212:8
87:16 109:10,13	256:9 263:2	passed 250:18	12:9 17:9,13 18:4	246:2 289:12
109:17,18,21	272:20 276:20	path 115:22	22:16 23:5 32:15	periodically 274:10
110:8,10,14,15,16	277:15 288:12	Patrick 140:14	38:19 41:16 42:3	permanent 206:10
110:22 111:3,4	315:21,22 318:4	pattern 65:6	44:6 52:15 65:22	permit 36:3,19
112:14,15,17	partially 119:10	Patty 1:24 3:2 5:14	69:12,13 85:18	46:14
132:4,10 140:19	PARTICIPANT	6:3,10,12 27:1	101:9 105:6 109:1	permits 16:14 46:5
141:16 143:15	83:19 101:11	45:1 64:21 106:17	113:9 115:21	78:18
165:6 166:12	participants 39:7	Patty's 34:21	123:14 124:21	permitting 130:13
170:21,22 172:14	209:18,21 214:16	Paul 1:23 3:18	140:10 211:11	Perret 112:10
173:7 176:20	participate 211:21	23:22 28:12 29:19	213:7 214:4,14	person 11:9 58:4
178:6 188:3	287:2 299:2	31:4 32:4 33:14	238:20 239:21	70:13 88:19 290:9
196:14 223:21	312:18 318:19	34:12 35:7 44:16	240:8,10 244:13	314:7
225:17 232:19	participated 6:14	49:13 50:13 51:18	261:1 262:5	personal 193:14
233:14 235:19	16:19	60:19 61:14 62:12	266:13 270:8	316:22
260:12 262:13	participating 6:20	62:18 64:14 65:9	272:18,20 282:10	personally 67:3
269:1 283:12	109:2,6 123:5	66:5 67:6 91:10	283:18 285:21	188:22 221:13
287:14 294:2	180:13 204:7	92:16 94:6 100:20	290:7 291:18	perspective 25:20
306:11 315:1	209:19	101:3,6,10 103:13	310:2 311:18	98:3 117:11 155:9
package 210:14	participation	109:21 112:5	312:1 313:2,8,9	175:5 214:15
packet 145:1	227:13	140:22 141:2,18	313:14,17,17	216:5 221:21
page 60:6 76:21	particular 9:4	141:21 142:16	314:12 318:16,18	241:3 251:20,22
82:12,13 83:15,18	15:21 22:11 35:14	143:5,10 146:1	peoples 205:13	255:19 262:21
85:6 98:12,17	54:17 139:14	161:1,2 166:7	perceive 53:18	307:5
100:17	140:2,4 162:22	177:5 180:22	perceived 20:12	perspectives 87:5
PAIGE 2:13	197:4 201:9 204:5	181:3 185:19	251:4	143:1 166:8
painful 50:8	213:8 216:3	190:2 192:16	percent 15:18 19:3	pervade 45:17
Pam 2:5 63:10	219:19 224:8,9,20	193:19 280:4	20:15 102:3 140:5	perverse 30:16
112:5 267:15	240:8 241:14	296:2 307:2	140:6 148:5	Pete 55:4 318:1
279:18 283:19	254:5,14 271:1,1	Paul's 43:22 72:12	151:11 161:15,21	petition 230:21

231:3	plain 55:14	133:1 134:5,10	207:1 208:6	PowerPoints
PFMC 234:17	plaintiffs 130:5	135:10,19 137:18	212:11 225:13	278:19 312:8
236:10 259:11,16	131:20 153:16	148:9 160:20	229:11,16,22	PR 227:13,18
259:21	plan 33:16 34:3,20	161:18 163:15	230:2,11,12,16	272:13
PFMC-managed	35:1,5 42:7 44:8	165:7 177:7,12	237:13 239:3,14	practicable 220:1
235:11	49:17 79:19 80:6	181:15 183:19	245:16 246:13	practical 122:16
phenomena 137:6	95:16 105:22	184:2 185:18	295:15	221:10 260:3
Phil 10:11 52:5	144:14 145:10	186:9,19 189:20	populations 224:9	practice 191:3
53:2	151:5 166:20,21	197:3 230:17	228:21 237:12,16	practices 112:20
PHILLIP 1:25	237:11,15,18,19	231:9 259:8 265:5	238:1 239:16	113:1,14 180:14
Phil's 10:11	285:10 312:14	270:7,21 271:6	254:1 255:9,12	187:8 261:19
phone 34:6,8 109:9	planet 71:20	273:6 276:17	258:11 260:8	274:11 281:17
141:22 308:22	planned 118:11	286:9 289:9,18	portion 16:6 29:7	282:12 283:19
313:18	135:15	290:20 291:20	52:12 53:17,20	309:22 316:14
phrase 21:18 29:8	planning 5:6 65:18	292:8 293:7 305:4	59:6 234:5 235:8	PRD 156:1,3,7
phrases 45:12	127:20 203:7	pointed 110:3	Portland 20:20	157:4,14 233:5
physical 138:18	284:14	points 85:4 135:3	position 143:15	precedent 298:5,16
pick 36:18 308:22	plans 41:3 79:10	135:22 195:13	274:3 297:1 302:1	predator 16:2
picking 37:13 43:6	114:21 163:6	205:13 293:10	306:9	predict 165:6
294:18	166:14,15,15	poles 146:9	positions 302:14	243:20 247:18
picture 26:21 45:8	plastic 146:9	policies 89:21	positive 215:6	prediction 253:22
45:20 228:11	play 180:4 263:3,7	90:10 190:22	227:20	predictions 254:3
292:7,15	298:10 303:6	policy 25:13 40:3	possessed 210:3	prefer 61:22
pie 235:5,19 238:5	playing 32:14	87:10 90:4,11	possibility 66:8	164:17
260:5	please 14:16 75:7	93:2 127:12,13	291:7 309:11	preferred 120:20
piece 125:10	81:11 86:4 109:6	166:12 167:10	313:5	218:22
128:10 130:12	133:16 141:10	169:12 178:11,16	possible 26:2	preliminary 61:18
131:12 135:14	143:6 155:5	179:6 180:2,3	102:18 128:2	200:13
pieces 128:15,17	157:20 161:1	190:10,20 191:22	179:1 204:9 207:8	premier 104:7
pioneer 41:12	169:13 171:6	258:19 284:5	245:13 315:9	prepared 8:11
pitched 5:17	173:10 176:21	286:9,11 287:8	316:20	113:10 168:22
place 1:13 43:10	196:3 215:18	290:22 307:5	possibly 52:8	307:12 318:12
51:15 57:3 62:2	218:4 220:3 241:8	polish 318:21	post 312:7	preparing 253:13
64:5,12 77:20	241:12 316:15	polished 310:3	post-nesting	present 1:16 2:9
79:7 84:6 88:5	317:1	pollution 62:1 63:3	202:15	70:14 142:21
96:16 151:1	pleased 66:18	64:4,11,17 68:2	potential 33:22	240:11 281:15
170:10 193:9	plenty 215:20	71:9 89:12,22	47:2 57:15,20	presentation 3:13
201:16 212:3	plow 27:12	pool 46:9,17 282:6	67:22 72:15 113:2	142:6 143:4,19
224:21 259:16	point 11:22 14:2	poor 56:13 200:11	121:18 136:15	152:10 177:19
286:6 293:6 295:2	21:12 24:11,15	popped 282:11	138:16 204:21	180:9,22 181:2
304:22 308:1,1	25:3,11 26:15	pops 295:5	213:4 275:22	182:7 187:12
312:11 313:14	28:8 31:18 48:1	populate 226:6	281:18 282:12	192:8 193:7 196:7
placed 86:14	54:14 69:9 70:16	population 131:15	potentially 203:20	197:15 207:14
placement 23:2	85:5,20 92:11,13	136:18 163:7	275:20 298:22	221:19 225:4
places 29:10 63:2	92:21 97:15	165:2 169:17	pound 36:20,22	227:8 233:17
75:18 76:3 235:17	102:13 121:3	170:3,8,9,19	pounds 59:14	319:1
236:3 319:4	127:22 128:6	171:5,17 173:3	209:16	presentations

222:11 278:18	238:5,8 281:11	24:7 65:17 181:7	129:4 144:11	127:6
presented 108:14	309:19	215:12 222:2	155:9 171:9 172:6	proposed 11:8,9,11
161:8 208:5 213:4	priorities 188:4	242:11	180:17 194:6	114:21 121:6,13
241:15 252:13,18	225:17 295:21	procedural 181:8	282:2 303:6	127:19 144:6
presenters 278:11	prioritize 81:14	procedurally	304:22	154:6 158:10
presenting 109:22	82:2 91:12,18	181:11	produce 315:3,9	163:10 199:10
preserves 21:12	92:4,17 95:13	procedure 125:19	produced 201:11	proposing 89:9
presiding 1:14	100:10 103:20	125:21 300:4	234:7,9	114:15 115:17
pretty 13:10 25:15	prioritized 94:12	proceed 23:17	product 307:8	315:10
50:4 55:18 87:1	prioritizing 94:15	141:1 213:18	production 236:8	proposition 131:2
117:20 170:12	97:16	process 22:19,19	productive 5:8	propositions 130:8
199:8 202:12	priority 91:13 93:3	105:16 113:6,15	176:8	pros 304:4 315:11
203:2,3 214:7	93:16 95:6 226:8	113:16 114:22	productivity 74:7	prospective 169:4
239:21 276:14	private 129:13	116:11 118:8,9	74:14 239:2,18	193:14 196:10
283:6 297:10	privilege 39:20	121:2,4,15 127:8	professionals 295:4	201:7,8 221:17
305:7 310:12,20	305:12	127:17 128:6,22	professor 181:6	protect 89:12
prevents 214:12	privileges 302:11	129:2 142:12	program 3:8 7:8,9	protected 3:6,10,16
previous 53:22	privy 153:16	143:1 144:1,8	7:13,14 38:6,13	3:22 7:15 60:6,22
90:14 168:13	167:17 168:6	145:20 153:18	38:22 39:10,18	61:1,3,9 81:21
197:15 203:5	proactive 227:9	155:21 157:11	42:12 46:22 50:6	103:17 104:18,19
296:17	proactively 225:14	158:11,14 160:10	93:12 114:1	104:20 109:20
previously 89:20	probability 134:2	161:13 166:9	147:21 218:10	113:19,21 114:17
91:7 151:7 166:22	probably 10:15	168:21 169:7	276:20 277:7	141:15 145:2,8
168:12 205:1,19	16:17 19:6 26:13	171:13 172:13	programs 37:13	152:22 155:20
284:7	32:19 53:4 62:9	175:6,16 176:2,13	40:5 41:10 42:2	160:4,8 162:8,11
prevue 214:17	62:21 86:20 95:19	176:17,22 179:10	43:9 124:7 135:11	163:10,19 188:15
pre-decisional	102:12 116:19	180:6 181:5 182:4	135:20 217:19	193:2 194:7
255:16 305:12	175:18 184:22	183:16 185:7	progress 51:12	196:21 197:6,19
priced 43:13	213:2 226:1,3	187:19 189:19	65:20 311:20	203:12 208:7
primacy 104:12	244:8 287:10	191:10,14 194:5	317:18	210:13 213:21
primarily 16:9	292:5 293:21	194:11,22 195:5	project 162:8 313:3	265:3 270:16
148:1,22 150:7	problem 17:1,2	197:8,22 199:15	projecting 110:3	271:3,10,17 273:1
173:17 197:21	19:10 20:22 28:18	199:16 204:14	projections 220:10	273:16 279:13,15
198:13 199:3	65:12 72:7 88:2	214:19 215:1	prominent 147:4	286:18 296:1,21
primary 171:1	88:22 96:8 123:8	216:8 217:2 221:9	promulgate 79:9	305:11
174:14 188:16	134:9 136:19	222:13,14 227:14	promulgated 79:20	protecting 89:22
198:20 226:3	147:14 148:9	233:21 237:11	proof 137:9	protection 74:17
273:18	149:2 203:17	244:9 256:5,12,20	properly 131:21	212:2
prime 169:22	204:14 207:6	257:7,18 258:18	132:5	protective 163:18
primer 216:1	208:17,18 214:7,8	259:6 265:19	proponent 66:12	proud 69:14
principle 18:15	230:6 295:5	270:1,19 275:7,10	299:17	prove 137:11
principles 28:2	303:12 306:12,19	276:6 283:5 287:2	proportion 140:3	168:15
print 163:14	problematic 311:1	292:13 293:10	199:6	proven 68:2 70:5
prior 54:5 90:8	problems 12:20	295:1 302:3,5,6,8	proposal 247:12	provide 10:19 12:7
104:11 125:13	13:1,8,10 14:11	303:20 318:11	315:3	25:8 40:2 48:2
128:20 151:12	17:7,15,19 21:8	processed 167:2	proposals 27:11	60:18 77:16 102:6
154:16 158:11	21:14,16,20 22:5	processes 113:8	propose 43:21	103:7 142:3 152:1

157:5 158:18 172:22 187:3 194:15 216:6 217:1,11 220:20 220:22 258:19 263:15 273:17 274:8 275:5 286:22 301:18 312:11 318:10 provided 15:16 159:2 167:19 176:3 197:20 208:8 212:1 216:7 216:10 217:5,17 219:17 262:8 provides 84:7 145:3,18 163:15 236:9 273:20 providing 6:21 113:12 122:15 127:7 228:1 288:16 312:16 313:1 provision 35:21 36:13 provisions 34:4 35:1 37:14 40:15 47:1 79:18 proxy 219:18 prudent 165:18 185:10 199:18,19 211:19 262:15 287:5 public 214:21 252:7 254:9 301:10 302:4,5,6 302:22 303:15,21 305:2 306:3,6 308:20 publically 304:18 publication 156:3 159:4 publish 206:7 publishable 268:14 published 158:22 159:5,11,18 163:5 168:1 212:6 263:5	Puerto 111:16 Puget 236:4 pull 12:2 32:5 44:14 227:1 278:7 315:18 316:4 pulled 32:4 pulling 29:20 316:13 pulls 65:4 purchase 46:10 purchased 46:18 pure 132:22 165:3 purple 243:9 purpose 86:5,16 88:18 131:7 151:22 197:10 purposeful 130:14 purposely 115:19 purposes 123:19 124:17 134:10 178:12 190:18 286:13 purview 194:7 push 136:8 pushed 206:21 212:14,17 put 6:18 8:18 19:7 20:5 23:5 24:12 25:14 28:21 29:7 37:1,7 41:16 43:9 44:1 58:14 82:19 85:14 87:18 116:13 117:7 122:7 150:13,22 151:9 233:13 236:19 256:21 278:17 290:1 294:14 308:20 316:21 putting 17:17 222:19 251:2 315:22 PVA 173:3,5 P-R-O-C-E-E-D... 5:1 P.D 11:3 p.m 107:4,5 108:2	232:2,3 279:3 319:8 <hr/> Q <hr/> QA/QC 276:20 277:11 qualified 199:22 200:1 qualify 93:6 quality 56:13 57:9 57:18 138:17 215:12 268:4 275:4,4 quantitative 207:8 207:12 213:4 quantity 15:13 138:17 quasi 172:15 question 42:16 43:15 53:12 55:10 57:5,12,17 59:8 59:12 64:4 67:8 69:13 70:1,21 78:20 83:10,10 84:12 88:16 98:2 101:15 131:1,15 138:10 161:2 164:5,13 165:14 182:8,16 184:10 186:3 187:10 188:5,21 190:21 207:3 218:11 223:3,9 224:17 226:21 242:2 243:4,14 244:22 247:17 262:1 267:17 270:15 272:10 276:15 285:8 301:16 304:15 307:14 317:10,14 questioned 69:11 161:8 questioning 69:18 71:7 79:3 questions 3:12 8:2 10:9 33:3 53:8	103:4 116:21 117:1,5,22 138:7 140:9 142:21 143:3 177:20 184:8,16 187:3,7 205:20 213:9 225:5 244:4 261:17,18,20 267:15 270:9 277:6,14 294:18 quick 7:3 61:11 184:8 306:5 quicker 14:2 quickly 142:2 159:20 203:15 204:8 209:4 215:22 233:20 288:8 quiets 277:20 quite 58:21 139:1 139:18 161:11 208:12 212:22 218:1 222:7 240:19 261:10 296:4 309:5 quota 16:15 18:7 34:19 35:3 36:1,3 36:8,19 37:16,19 38:3,12,15 40:8 40:16 43:11,16 44:2,5 46:6,9,17 47:3 49:18 50:14 quotas 17:3 32:18 33:15 42:6 quoting 257:14 <hr/> R <hr/> radar 201:22 radical 51:6 raise 70:18,20 88:18 101:9 140:11 raised 188:5 205:20 270:7 315:5 raising 70:17 313:5 rake 43:5	ran 173:6 randomized 268:9 Randy 1:22 2:8 22:14 27:1 51:17 54:22 65:9 66:5 72:6 77:16,21 82:16 83:5 85:3 89:2 92:9 96:12 225:2 228:17 260:17 Randy's 25:11 26:14 range 116:19 rank 268:12 ranks 268:6 rapid 15:3 146:18 147:5 rapidly 201:9 203:3 207:11 212:18 rare 55:6 ratcheted 153:12 rate 201:1 238:6,12 238:19,21 239:9 242:20 243:5,10 243:16,17 245:4,7 245:12,14,17 259:13,15 rates 226:15,16 237:5 238:10 246:17,17 259:9 ratification 106:7 Rauch 183:18 raw 195:15 Ray 248:14 249:20 251:10 269:4 reach 221:6 reached 146:12 150:15 153:7,15 239:11 reaching 163:2 181:22 186:16 294:9 reaction 193:10 read 8:9,18,19 13:18 14:2,3 23:13 29:2 30:8
---	--	--	--	---

58:21 63:6 73:4 73:10,17 74:20 84:21 88:14 100:21 105:12 133:7 163:14 297:6 readable 249:7 readily 187:15 219:20 reading 28:14 88:19 300:1 reads 33:15 ready 140:12 141:1 141:4 146:19 188:7 231:21 279:4 318:2 real 13:1 15:15 57:17 65:17 93:5 184:8 230:2,16 263:11 264:1 283:14 289:5 realities 17:16 reality 20:14 68:6 68:10 realize 61:9 299:4 reallocate 38:18 reallocation 34:1 34:19 35:3 37:5,7 38:14 39:21 40:8 41:7,18 42:6 47:2 reallocations 40:16 41:15 really 13:3 15:1,14 18:13,14,16 19:7 27:5,17,17 32:9 34:17 37:1 40:11 42:7 50:16 53:8 55:5,10 57:13,17 61:17 66:17 70:13 71:15 87:4 96:7 98:2 114:4 116:9 117:9 118:6,10 127:1 146:14 161:18 163:15 166:2 167:15 170:2 173:11 184:19 194:6,8	197:11 205:8 212:21 214:18 217:9 218:3 219:10 225:4 227:1,8,9 231:13 233:20 251:12,16 252:21 256:13,20 256:22 257:10 258:21 259:5 269:9 272:21 276:13 277:11 292:22 293:3 294:2 295:14,22 304:6,12 realm 114:13 rearranged 7:13 reason 23:10 119:21 169:1 190:10 245:12 289:20 299:9 300:4 reasonable 9:4 43:18 165:18,20 185:10 199:18,18 262:15 287:5 reasons 131:10 133:20 178:16 184:4 251:7 253:12,19,20 rebounded 230:13 rebuilding 59:4 60:2 rec 5:10 6:7 10:17 10:20 49:6 52:1 58:7,13,20 59:2 59:11 94:10 recalculates 43:17 recall 172:7 recaps 147:2 received 104:16 158:3,8 166:2 249:10 262:9 281:13 Reclamation 304:19 recognize 290:8 295:11,12	recognized 80:2 149:8 179:18 recognizes 29:5 recognizing 66:19 104:8 181:4 300:10 recommend 9:6 83:1 90:19 100:19 121:20 133:11 227:16 recommendation 51:8 54:20 58:8 71:4 72:9,12 83:4 83:7 97:4 118:9 119:16 121:14 154:20 247:7 253:6 recommendations 6:22 7:9 30:2 33:6 37:12 47:21 48:2,4 49:2,6 59:3 73:6 75:20 77:14 80:22 81:4 82:12 84:14 98:15 104:20 158:19 167:20 172:22 180:3 190:22 194:20 209:9 218:13 220:12 256:11,19 309:8 309:14 310:11 315:20 316:6 recommended 8:13 29:20 48:9 49:3 49:12 60:16 76:5 76:16 81:5 83:3 97:5 119:12 150:2 152:14 284:3 reconcile 126:17 194:5 reconvene 231:17 317:18 record 12:12 30:3 30:15 54:7 100:12 107:4,5 118:22 122:22 123:10 126:3,4 129:19	140:18 152:8 155:6 189:14 190:4,6,7 205:18 232:2 279:2,2 306:2,4 319:8 records 190:15 recover 136:18 recovered 16:4 recovery 134:1 152:5 163:5 237:11,15,18 recreational 49:1,5 49:18 50:3 56:7,8 56:12,20 59:12 94:11,12 103:5 198:19 200:7 206:18 recreationally 53:11 54:6 recycling 36:13 red 11:15 12:6 44:17 47:16 51:10 59:4 60:1 96:3 129:18 198:19 235:11 redo 128:14 reduce 134:15 164:22 210:5 220:19 245:9 reduced 167:13 209:20 245:14 reduces 256:16 reducing 101:22 203:20 209:13 293:7 reduction 220:22 221:7 250:13 259:16 260:4,6 reductions 137:4 red-lined 90:1 reed 197:11 reef 3:21 68:18,20 68:21 195:19 198:12,16 200:12 202:1 204:3 226:18 refer 209:6 278:20	referee 205:8 reference 133:1 134:6,10 142:22 161:3 164:6 213:9 281:10 309:4 312:2,9 referenced 62:15 132:13 references 62:15 65:13 75:19 referred 136:3 209:8 referring 53:10 92:19 reflect 26:3,4 reflected 25:22 reflecting 179:2 reflects 7:21 reformulate 285:16 refresh 30:8 48:5 54:12 regard 84:20 225:5 regarded 65:14 regarding 92:10 138:11 157:7 regardless 79:14 169:7 194:21 242:22 265:10 288:2 regards 69:21 90:22 258:20 regime 151:6 233:13 238:11 239:6 243:14 244:7 247:20 250:4 266:5 regimes 242:18 254:11 255:1 region 3:17 109:10 140:20 154:10 167:1 197:19 233:1,3,5 248:6 260:15,16 264:8 264:18 271:1,8,22 275:8 295:16 regional 3:15,18,22 4:13 45:9,14
---	--	---	---	---

46:22 59:4 109:13 112:21 141:14,16 196:21,22 203:8 221:22 228:21 233:1 272:14,15 273:1,2,4 276:5 277:10 279:11,12 285:13 293:18 294:16 regionally 223:17 regions 101:1 191:5 223:6,12 260:15 271:10 272:12,22 273:10 275:13,16 region-wide 272:6 Register 155:5 159:18 regs 121:9 276:9 299:1 305:3 regular 227:15 regulate 214:10 regulation 185:12 regulations 96:6,9 97:9,9 127:12 133:9,10 166:18 199:10 206:7 263:19 267:8 regulatory 79:6,13 80:7 120:4 121:12 122:18 299:6 reinitiate 193:11 reinitiated 153:20 reinitiation 144:16 203:4 reinsert 92:7 reintroducing 36:14 reiterate 116:10 166:10 reject 64:10 related 22:10,10 40:8 76:19 222:3 281:21 307:13 relation 73:7 relationship 195:2 relationships	265:22 relative 170:5 217:17 302:1 relatively 63:5 147:13 148:16,16 198:17 202:21,22 216:19 release 301:20 302:12 released 305:13 releases 305:8 relevant 11:20 124:3 reliable 165:9 relied 158:2 rely 10:19 54:11 115:15 162:21 177:8,8 183:9 remain 93:1 96:15 97:21 remains 99:20 169:3 293:8 remanded 153:8 155:15 194:1 297:13 remarks 114:7 remember 11:8 27:6,13 29:19 45:6,19,20 93:11 125:12 131:17 133:5 223:19 269:18 284:15 remind 95:21 180:12 279:7 reminder 11:10 26:22 reminding 243:17 281:6 removal 62:6 136:16 removed 136:16 151:13 157:12 removing 50:9 152:15,16 rent 36:19,20 reopen 150:10 reopened 151:9	reopening 172:5 reorganization 104:9 repair 69:4 repaired 68:21 repeat 28:18 252:16 253:7 repeatedly 252:11 replace 133:18 replicate 75:21 replied 183:13 report 86:1 200:15 201:11,21 249:5 249:12 273:2,4,5 280:8 318:6,12 REPORTER 290:8 290:14,17 reports 218:14 representative 177:22 280:21 316:19 representatives 285:1 represented 52:20 145:17 representing 32:10 represents 99:8 140:6 reproduce 19:15 reproduction 226:16 229:13 reproductive 203:1 229:10 request 70:9 105:11 120:21 121:6 191:19 203:4 231:4 305:13 312:4 requested 154:4 206:6 230:8 231:6 requesting 78:15 306:16 requests 305:10 require 297:8 required 119:17 128:13 136:20,22 155:16 159:9	requirement 52:7 124:12,22 requirements 119:2 120:1,4 121:12 123:12,15 125:22 250:20 251:18 306:2 requires 124:15 137:2,14 161:22 research 2:5 54:14 150:8 174:16 187:20 294:22 295:8,20 research's 265:3 Reserve 27:16 resilience 66:21 resolution 201:9 resolved 12:20 resource 1:18 141:15 146:17 resources 3:6,10,16 3:22 7:16 60:6,22 61:1,4,9 103:17 104:18,20 113:19 113:21 114:17 138:18,19 145:2,8 152:22 188:15 193:2 194:7 196:21 197:6,19 203:12 208:8 210:13 270:16 271:4,11,17 273:1 273:16 279:13,16 286:19 296:1,21 313:2 respect 159:8 173:12,22 241:20 respectively 150:18 respond 127:1 223:14 response 128:19 207:2 265:14 responsibilities 197:14 308:11 responsibility 258:5 308:18 responsible 166:11	167:9 169:10 274:1 rest 17:3 248:17 314:7 restate 88:7,7 restating 88:17,17 88:18 result 87:2 137:16 152:3 176:13 199:17 246:7 268:14 292:14 297:22 307:8 resulted 128:11 173:9 174:6 resulting 25:19 results 127:9 167:18 resumed 232:3 retain 87:19 90:20 retire 44:7 retired 1:21,25 280:2 return 43:18 254:9 284:6 returned 150:20 172:2 174:9 returns 54:18 revert 82:20 83:8 91:8 reverting 87:20 review 118:16 119:9,15 121:22 125:13,18 167:22 210:17 217:10 225:22 254:9 257:7 275:8,12,12 275:17 277:1 288:9,22 289:1,14 289:21 292:5 299:15 304:15 317:3 reviewed 68:9 71:21 72:1 125:14 158:9 166:16 183:21 216:8 268:7,12 269:15 reviewing 154:11
---	--	--	--	---

216:15 287:3 300:1 306:14 reviews 163:6 275:6 revised 6:19 revising 60:21 160:7 revision 61:12 revisions 135:8 reword 39:5 rewrites 104:17 rewritten 62:14,18 re-amend 167:5 re-including 29:13 RF 31:12 RFMOs 60:3 RHEAULT 2:3 80:9 81:9,12 82:7 82:11 89:6,9 91:15 94:22 96:3 96:17,20 98:5 106:16 rich 304:4 Rico 111:16 rid 32:21 49:21 ride 238:21 right 20:1 25:16 27:10 37:8 41:5 48:13 56:17 71:7 76:19 83:17 94:14 95:9 96:16 99:6 100:18 112:7 117:8 130:22 131:7 140:21,21 141:12 160:22 164:4 166:6 177:21 185:22 186:6 191:9 196:2 196:5 216:2 228:19 229:21 231:3 238:21 249:2 251:6 275:7 275:11 278:2,15 279:21 281:2 285:18 290:11 296:14 303:10,15 306:3 317:1	rights 16:8,22 36:9 80:18 191:2 261:6 292:18 ringing 205:8 rise 60:13 103:14 RISENHOOVER 2:17 risk 62:2 63:2 64:5 64:12 129:18 190:13 245:10 246:5,5 250:14 253:2 293:8 risks 294:11 river 4:10 232:7 234:6,9,11 235:1 235:13,13 236:5 237:9 242:10 248:7 260:4 271:22 272:6 Rizzardi 1:14,17 5:3 21:3,18 22:3 26:16 44:18 45:6 61:7 64:2,8,20 72:21 75:3,7,10 86:22 95:14 99:11 99:17 100:4 104:1 105:17 107:1 180:20,21 222:10 272:9 276:3 291:16 298:20 317:9 road 39:6,13,21 116:7 290:20 robust 169:20 170:14 176:3 184:1 robustness 217:18 rockfish 271:18 ROGERS 2:18 role 5:15 104:12 143:21 167:4 175:9,11 180:5 198:5 252:7 298:10,12 307:4 roles 142:15 144:1 197:13,17 198:11 200:3 274:21	roll 37:18 rolled 237:19 room 1:13 22:16 45:21 50:16 85:17 109:3,6 139:19 185:22 195:20 205:14 224:22 231:17 232:5 277:20 290:7 295:5 298:18 307:16 313:8 318:15 roughly 212:7 236:7,19 round 128:13 row 13:3 247:1 250:8 258:15 RPA 185:12 RPAs 165:17 293:3 RPM 217:13,13 RPMs 150:1 165:16 166:5 213:10 217:7 293:3 rule 8:14 64:21 153:4 155:3 156:3 159:4,5 208:1 211:5,15 306:18 ruled 133:12 rulemaking 79:11 79:13,21 80:13 118:19 211:2,9 rules 43:22 56:3,19 57:3 77:9 78:6 79:2 88:5 155:18 rule-making 302:3 ruling 297:5 run 56:11 135:9 245:7 246:15 247:5 274:5 291:6 running 175:3 231:19 246:7 run-through 7:3 rural 20:5 rush 55:8 Russ 10:19 53:6 57:5	RUSSELL 2:14 <hr/> S <hr/> Saipan 78:11 sake 238:4 244:18 sale 53:11 54:6 salmon 4:11,14 87:13,15 232:8 233:2,3 234:3 237:22 239:16 242:4,18 249:18 252:9,15 253:20 254:6 257:16 258:11,18 264:2 264:19 266:12 270:17 271:2,20 284:20 289:3 Sam 79:4 183:18 San 279:19 Sarasota 279:9 SAS 250:1,2,17 252:21 sat 270:4 save 33:1 saw 49:9 238:4 257:21 287:15 293:11 294:17 312:8 saying 17:18 38:14 39:17 42:5 52:11 57:16 65:16 66:9 71:22 72:1 79:1 94:7,11 118:1 230:15 235:7 245:18 301:14 says 38:10,17 43:15 44:1 50:15 52:13 79:15 84:5 88:6 96:10 246:14 255:13 274:16 scale 14:21 15:6 16:10 17:2 20:8 20:19 35:17 45:20 46:18 138:21,22 138:22 236:16 294:14 scares 41:19	scenario 12:11 223:22,22 246:1 247:1 252:17 scenarios 247:5 250:2 269:10 286:22 308:7 schedule 231:20 247:15 249:11 253:20 256:3 264:14 287:22 288:3 289:3,9 scheduled 317:13 schedules 288:2,6 School 1:17 science 63:18 65:14 66:1 69:6,11,13 69:15 71:13 72:6 136:11 151:18 152:18 162:16 172:14 182:22 188:3 200:14 201:10 203:14 206:13,21 207:10 208:7 217:14 225:17,18 230:7 230:15 231:5,12 248:1,3,16 251:9 253:11 265:20 268:7 294:7 295:12,13 Sciences 248:15 scientific 71:17 135:18 157:5 169:14 179:3 248:4 249:14,16 250:4 257:11 269:15 scientifically 176:15 scientist 3:18 69:14 143:14 267:22 scientists 68:22 69:7 203:13 230:10 269:22 scope 6:5 119:8 199:7 273:14 scoping 203:16
--	---	---	--	---

204:2,18 214:20	31:19 79:10,21	141:8 144:19	sentences 38:9	setting 129:8
scramble 156:21	86:1 88:13 124:8	147:3,8,17 173:14	separate 40:19	148:11,12 256:2
159:19	124:9 216:12	202:6,9 212:16	57:21 67:20 78:10	settlement 153:8
screen 85:12	section 3:5 29:22	235:17 236:7,20	136:10 224:14	153:14 155:16
201:22	31:8,9 47:17 48:7	245:3 247:2,15	separated 224:13	193:10
scrutinizing 45:15	48:8 60:12,22	248:21 250:8,12	September 27:3	severity 162:13
se 24:7	61:9 62:14 73:3,9	250:18 252:22	153:19 201:10,12	SF 227:22
sea 60:13 103:14	73:12 75:1,21	261:8 274:16	210:10 249:13	SFD 144:19 156:15
132:6 136:12,13	76:19 77:13 94:11	275:7 276:1	sequence 129:19,21	157:13 158:17
139:12 159:10	95:17 98:10,10	283:13 295:5,9	130:10	172:21 184:12
160:14 162:15	100:21 102:7,12	304:8 306:17	SER 3:21	186:4,15
163:5 169:21	103:5 108:11	314:4	series 37:18 38:4	SFP 168:12 186:16
170:8,14 197:10	112:20 121:12	seeing 22:20 44:18	130:8,8 147:16	shaded 127:16
200:7,13,16	123:12,16 124:4,5	101:1 228:2	172:8 310:10	shallow 3:14
202:10,19 203:16	124:5,13,21	275:22 293:15	serious 28:4	141:20 145:14
203:21 204:3	125:13 126:14,20	seek 316:8	seriously 230:2	147:9 148:3,4,11
206:8,22 208:5,17	133:9 147:8 156:1	seen 7:19 24:3	254:6	148:16,17 149:4
208:18 209:13	156:2 178:13	306:20	service 1:21 79:16	151:5 160:11
210:5 212:9	190:6 191:1	segment 147:10,11	112:6 114:10	161:14 162:3
215:13 216:9	205:16,17 228:4	170:2	149:18 154:18	shallow-set 172:20
219:1 220:8,19	238:4 273:12	segregate 198:7	174:1 191:17	174:6,13
225:22 230:6,12	274:3 303:20	select 178:12	204:20 226:12	share 14:18 15:13
230:22 295:15,17	sections 19:19	220:18	244:16,21 263:15	21:6,19 22:3
seafood 98:21 99:5	29:19 59:3 124:3	selected 247:2	265:10 272:19	25:13 37:12,16,19
season 30:18 256:2	sector 53:20 54:9	sell 53:17 55:13	280:3 308:17	38:6,12,15,22
seasonal 35:15	88:9 94:11,13	56:9 215:7	311:8	40:3,5 41:3,9
209:14	200:17 210:7	selling 56:21	Services 268:5	42:11 46:22 49:18
seat 73:20 300:11	239:4 244:14,15	SEMON 2:18	SER-PR 197:18	185:12 212:9
seats 232:5	244:20 245:3	Senate 126:18	session 5:8 108:5	253:16,17 260:20
second 33:8 57:9	249:19 266:1	send 102:18 105:3	108:19 109:2	276:2 285:21
57:14 87:8,9,18	sectors 49:19 50:3	158:17 255:4	112:16 231:15	299:16 302:16
90:22 91:2,3,5,9	86:15 88:4,8,21	278:19 305:21	277:18 282:4	308:18
91:11 92:13 95:22	200:3,7 249:9	sending 317:3	309:17 318:13	shared 28:6 75:11
97:7,14 99:18	sedimentation 62:2	senior 3:18 143:14	set 3:14 30:1 35:4	157:22 158:6
100:6,9,16 123:22	62:6,17,22 63:1	sense 9:2 10:10	38:12 48:14	165:21 195:9
128:10,13 132:3	64:5,11,17 68:1	50:18 71:16	132:19 137:6	301:4
132:16 136:7	see 8:12,15 9:8 11:2	190:17 208:12	141:20 145:14	shares 6:6 13:2,5
144:17 185:14	11:14 12:5 13:20	291:12 307:6	147:9,22 148:2,3	14:6 17:14 18:9
186:2 195:18	19:5 25:19 34:2	sensing 178:5	148:4,14,22,22	18:17,18 20:11
223:9 291:19	45:1 48:13 50:18	sent 65:2 216:12	149:4,4 150:5,20	21:13 24:6,18
secondary 197:7	52:8 57:19 64:18	288:22 312:3	151:5,11 160:12	25:13 26:14 29:3
secondly 193:18	66:4 70:4 84:14	sentence 13:16	161:14,19 162:3	29:4 33:8 34:1
245:9	84:22 85:12 86:4	14:3,6 18:2,13,15	171:15,16 202:6	40:21 43:12 45:13
Secretarial 118:15	94:10 95:12 97:19	24:12 28:5 30:12	220:21 243:18	52:12 70:20
118:20 119:3	106:10 116:15	33:14 42:5 44:13	272:22 309:13	sharing 181:19
121:22	118:7 123:5,7	48:20 57:7,9	sets 121:7 151:10	302:15 303:13
Secretary 26:7	127:16 130:18	62:20 77:4	163:17 216:20	shelf 16:17 198:15

shellfish 2:3 202:5	sidebarring 61:8	297:15,21 301:3	smart 240:10	262:10 271:19
shift 59:12 244:6	signature 275:12	303:11	smothering 62:16	278:5 282:6
307:17	signed 71:18 77:10	situations 52:14	snapper 51:11	284:11,17 286:22
shifted 85:20	194:13	284:12	social 95:17 200:2	291:10 292:15,17
307:20	significance 144:8	six 100:15 148:5	203:13 214:16	293:9 310:19
shifting 247:10	significant 20:21	size 18:8 20:1,10	soft 72:2	313:5 314:3 315:3
ship 68:18	77:3 175:11	139:19 146:20	softened 59:20	316:5
shoot 221:3	201:11 252:2	147:14 165:2	softening 52:6	sorts 80:15
shoots 219:8	255:10	174:18 246:15	solely 162:21 252:6	sound 99:22 100:11
shore 202:7	Silence 48:16	sizes 245:8	soliciting 293:2	176:15 236:4
shoreline 78:14	Silver 1:13,13	size/preference	solid 290:1	310:17 311:3
short 315:9	273:16	219:15	solution 17:14	sounded 227:9
shortcoming 227:5	similar 22:16	sketchy 63:8	237:21 252:19	sounds 16:22 91:1
shortcomings	132:19 190:7	skip 209:4	265:19	225:8
228:9	193:8 196:12	skipped 211:2	solve 13:8,10 14:11	sources 137:3
shorter 30:18	228:14 286:3	slated 106:5	24:6 123:8 222:2	163:1 177:8,12
132:20	298:14	slice 235:16	solves 24:18	219:2 224:18
shortly 110:1	Similarly 129:8	slide 118:7 140:21	somebody 9:19	south 111:14 139:8
short-lived 264:3	SIMONDS 191:11	146:19 147:1	262:7 267:22	260:13
shot 223:16 239:7	simple 42:5 47:6	148:7 149:5 151:3	296:6	Southeast 196:22
262:22 305:6	55:14 125:2	152:7 155:5	somewhat 175:9	197:19 200:14
show 130:1 154:9	191:20	157:19 160:1	190:7 194:18	203:13 207:10
168:16 209:2	simply 17:17 20:7	161:1 163:12	somewheres 15:10	212:14 225:18
showed 200:15	25:3 28:8 100:5	164:4 165:13	soon 257:16 277:19	240:20 279:11
243:11	117:15	166:6 169:13	sooner 309:14	286:3
showing 124:15	simulation 171:16	171:6,8 173:10	sophisticated 243:2	Southeastern
126:3 202:4,5	Simultaneous 71:2	176:21 177:19	sophistication	285:12
235:22	75:12 82:10 91:14	182:9 184:3 186:8	242:5	Southwest 136:11
shows 148:13 234:5	single 23:8	212:16 218:4	sorry 11:13 29:17	170:22 260:15
235:5,19 243:7	sit 9:7 258:7,10	219:4 220:3	45:3 89:8 92:16	space 204:13
Shultz 2:19 112:7	259:1 275:18	287:16 296:18	92:20 98:16	sparse 55:7 165:9
275:3 276:7	276:6	slides 123:6,18	232:16 262:5	spatial 218:12
278:10 279:14,14	site 139:6,18,20	141:8 142:9	280:18 314:21	spawn 234:3,14
296:10 299:10	140:2,5	144:20 154:9	sort 7:2,12 8:4 10:8	spawning 236:21
315:16	sits 255:17	161:4 175:4	11:15,21 12:5,7	242:10
shut 115:22 150:16	sitting 112:12	233:18,21	26:3,8 30:1 33:21	speak 11:11 12:10
side 67:15 114:16	222:6 281:2,5	slightly 37:4	36:12 37:6 48:1	12:10 34:8 52:2
114:17 130:22	situation 36:4,18	slot 106:4	53:3 57:18,20	58:3,4 59:20 73:8
131:7 137:10	37:1 46:11 78:1	slow 146:13	58:4,14 67:6	81:6 89:21 90:1
181:16 182:4,4	122:2 156:4,10	small 9:6 15:6,15	72:13,16 95:9	255:20 290:7
222:19 226:20	159:11 162:2	20:19 35:17 36:8	96:1 101:2 115:3	speaking 71:2
227:19,22 250:7	164:10 167:10,16	65:21 163:14	116:6 117:1 126:6	75:12 82:10 91:14
253:2 276:20	179:18 206:1	198:22 209:18	136:8 149:6 207:2	160:2 290:9,11
277:7 293:9,10	211:4 214:13	235:16 237:6	207:12 214:1	Spear 125:17
294:22 296:1	221:18 245:2	smaller 16:10 46:3	223:10 228:9	special 307:2
sidebar 104:3	247:11 282:22	46:18 102:14	239:20 242:7	species 16:2 17:12
106:9	284:2,3,6,19	222:21	250:21 258:12	19:12,18 25:1

31:14 32:17 80:12 80:19 87:15 104:19 109:20 115:10 118:6 120:5,7,9,18 121:19 123:15,20 123:22 124:1,17 124:18 125:7,8,15 126:11,13 129:10 130:11,15 131:16 131:18 132:13 133:1,4 134:1,4,5 134:7 140:20 152:6 160:4,8,16 160:17,17,18 161:10 162:8,11 163:8,10,18,19 171:1 183:5 185:3 197:21 198:20 203:1 211:14 213:21 219:9 222:21 228:3 229:4,16 234:16 236:14 271:2,19 308:19	sport 249:9,19 Sportfishing 2:1 spot 13:14 72:2 Spring 1:13,13 273:16 square 19:22 SSC 158:8,15 209:8 210:17 218:22 252:9 282:17,17 283:4 SSCs 48:14 St 1:17 55:4 318:1 stable 147:13 staff 22:13 109:17 110:15 111:4 142:7 172:10 178:19,19 188:14 188:15,17 197:20 203:10,11 216:22 227:12 248:5,5,13 252:20 254:21 272:13,15 273:1,2 274:8 285:12,13 287:1 292:21 298:21 301:12 308:15 316:12	stars 106:15 start 11:1 21:2 22:9 23:11 24:15 42:21 85:8 108:11 120:13,17 121:8 139:15 140:1 142:14 164:15 196:1,6 221:8 239:1 254:16 276:6,9 278:6 282:10 316:2 started 5:12 7:11 22:15 33:19 143:8 143:21 146:5 203:2 232:7 starting 69:7 101:17 108:4,20 starts 34:3 120:10 121:1 253:21 state 22:16 129:13 280:5 285:1 stated 78:16 94:9 238:17 statement 17:18 19:6 28:21 40:12 44:1 64:9 84:1,10 104:6,11 145:6 160:15 164:3 264:9 283:8 statements 84:16 90:14 101:3 States 2:8 42:12 43:3 100:10 269:1 298:2 Statistical 157:6 248:4 249:14 269:15 statistics 9:17 statue 185:11 status 78:8 81:12 102:2,3,10 103:16 129:9 157:7 160:16 163:6 170:9 175:11 185:2,4,20 205:9 216:9 220:7 284:7 287:1 288:3	289:11 296:11,13 297:14 298:8,14 299:13 300:9 307:2 statute 137:14 299:3 statutes 167:8 statutorily 169:9 statutory 120:4 121:11 122:18 166:11 277:7 300:20 301:5 308:11 stay 108:18 staying 91:6 steadily 205:5 stealing 292:17 Steller's 139:12 step 51:6,8 65:15 129:20 130:3 157:12 229:18 230:4 239:8 243:15 245:14 292:9 309:19 316:4 318:14 steps 102:16 130:8 244:10 282:9 307:18,20 318:8 stick 92:12 stock 21:9,21 22:6 56:12 169:20 215:9 216:9,18 217:21 218:2,3,22 219:6 220:7,10,16 226:1 stocks 15:2 17:8 18:20 19:15 59:4 60:2 74:7 81:20 89:12 102:1,3,9,9 103:16 215:13 236:4 237:10 242:19 263:19 STOLL 2:19 stop 185:18 226:4 stories 284:10 story 233:8,12 strange 287:12	Strategic 5:6 strategy 312:13 strength 131:3 strengthen 177:3 226:19 strengthened 84:18 stressed 67:16 stresses 62:8 66:20 stressing 253:14 stressors 130:19 Strictly 227:18 strides 101:22 strong 85:20 86:4 87:4 95:10 178:16 190:9,15 253:6 286:16 stronger 179:11 183:22 strongest 179:1 struck 222:18 283:18 292:19 structure 7:7 18:11 224:10 structured 39:12 258:21 293:20 structures 267:7 struggle 70:8 93:4 93:5 struggled 220:17 301:18 struggling 37:11 studies 3:13 61:19 108:13,14 116:13 138:7 278:12 281:16 282:7 study 3:14,20 4:10 63:5 71:13 140:10 141:19 180:11 188:7 192:7 195:18 197:4 207:4 231:22 232:8 268:10 291:9 studying 66:11 stuff 10:18 87:4 196:16 240:1,11 303:17
--	---	---	---	--

subcommittee 5:5 52:1,19,21 61:2 84:13 103:8	sued 296:11,12	supported 70:11 193:22 241:19	233:4 271:14 280:8 296:20	259:4,16,18,19 260:3 262:22 289:3 294:20 295:9 305:6 310:13 316:12
subcommittees 105:18	sufficient 318:5	supporting 90:2,13	sustainably 152:4	taken 5:15 23:1 93:7,18 162:9 170:6 210:18 270:11 286:4 301:22 302:14
subcomponent 132:1	sufficiently 267:5	supports 66:2	swallow-set 174:11	takes 144:8 202:10 217:20 218:15 219:1 225:10 289:22 293:6 295:2 298:12 315:18
subdivide 139:10	suggest 29:15 30:16 40:10 47:14	suppose 182:8	swear 261:16	talk 9:9 11:11 41:14 49:12 52:6 62:5,16 65:7 72:15 95:11 98:11 103:12 105:8 114:5 117:11 122:16 142:4 144:9 146:1 181:6 182:22 183:2 195:6 199:5 204:9 206:20 212:12 233:21 269:19 273:7,8 310:15 311:1 317:20
subject 23:2,3 118:5 171:11 221:21 266:19 301:20 302:4,6,12 306:6	suggested 13:5 23:21 31:5 33:13 33:14 63:12 81:19 92:17 98:12	supposed 57:1 58:12 128:7 281:15	sweat 43:7	talked 7:8 50:19 51:10 79:5 171:20 200:4 272:11 318:22
subjects 113:12	suggesting 24:5 91:22 92:5 313:11 313:20	Supreme 125:17	switch 188:7	talking 21:11 24:15 28:22 29:3 82:9 99:2 100:20 141:19 173:12 194:11 197:2 198:6,14 215:2 218:5 222:22 234:18 236:2 262:6 267:18 286:3 304:4 314:12 315:13
submit 145:1 179:15 209:12 210:19 309:9	suggestion 67:6 89:4,7 93:22 94:21 96:4	sure 9:17,20 13:21 18:1 25:10 35:11 42:3 45:5 51:7 63:6 85:14 87:13 96:16 101:18 105:11 115:21 116:7 128:16 137:20 161:5 192:12,14 194:9 201:21 208:11 228:19 253:15 261:11 262:22 290:21 291:14 293:5 295:2 299:4 299:8 318:5	switched 242:19	talks 60:13 85:1 179:21 262:10
submitted 120:22	suggests 34:22 35:22 81:20 82:3	surface 270:3	switching 291:1	
Subpanel 249:18 252:9,15	suite 24:22 209:12 212:2	surprised 216:21	swordfish 146:17 147:9 148:12,14 150:2,10,14 152:2 172:5 174:7	
subsequent 154:9 174:8 312:21	suited 214:21	surveys 226:13	system 20:7 38:15 71:9 72:3 166:15 211:8 242:17 272:1,3 305:17	
subset 275:8,12,15	suits 149:18	survival 146:15 152:5 226:15 258:5	S-E-S-S-I-O-N 108:1	
substance 182:4 222:13,18 233:19 292:14	sum 121:10	survive 35:17	<hr/> T <hr/>	
substantially 235:3 249:6	summaries 171:8	SUSAN 2:12	table 73:20 83:7 157:9 162:3 163:12 255:17 300:12,19 312:22 315:14	
substantive 176:1 181:9,16 293:9,10	summarize 173:11 194:17	suspect 46:4 226:22	tabular 155:8	
substation 248:9	summarized 143:18	sustain 134:19 138:16	tackle 6:1	
substitute 30:17 220:2	summarizes 263:4	sustainable 3:9 29:22 102:13 114:1,16 125:4 144:13,18,22 152:1,20 155:22 156:6 157:3,21 158:5 165:22 175:15 186:10 187:1 188:16 193:1 203:12 210:12 227:13	tackling 66:19	
subtle 79:22	summarizing 315:7		TACs 17:3	
sub-basins 234:12	summary 10:2 11:5 77:13 155:8 317:2		tail 26:19	
sub-panel 251:9 257:16	summer 61:2		take 23:4,17 29:6 72:13 76:7 103:2 105:11 106:12 114:15 130:14 138:6 143:3 145:4 154:4,5 155:4,12 155:15 159:14 162:12 164:1,2 183:19 189:8,22 190:16 193:9 196:17 200:7,20 204:22 206:2,16 214:6 222:20 223:7,10,15 229:17 231:15 232:5 242:20	
success 13:6 14:7 14:10	sunshine 265:19		take 23:4,17 29:6 72:13 76:7 103:2 105:11 106:12 114:15 130:14 138:6 143:3 145:4 154:4,5 155:4,12 155:15 159:14 162:12 164:1,2 183:19 189:8,22 190:16 193:9 196:17 200:7,20 204:22 206:2,16 214:6 222:20 223:7,10,15 229:17 231:15 232:5 242:20	
successes 285:20	supply 169:18		take 23:4,17 29:6 72:13 76:7 103:2 105:11 106:12 114:15 130:14 138:6 143:3 145:4 154:4,5 155:4,12 155:15 159:14 162:12 164:1,2 183:19 189:8,22 190:16 193:9 196:17 200:7,20 204:22 206:2,16 214:6 222:20 223:7,10,15 229:17 231:15 232:5 242:20	
successful 21:13 126:2 234:1 241:21 251:21 254:20 264:18	support 52:11 65:15 67:20,21 81:18 84:17 92:2 92:18 95:2 98:5 99:21 105:13 126:5 197:20 241:22 252:2,4,14 253:17 312:12,16		take 23:4,17 29:6 72:13 76:7 103:2 105:11 106:12 114:15 130:14 138:6 143:3 145:4 154:4,5 155:4,12 155:15 159:14 162:12 164:1,2 183:19 189:8,22 190:16 193:9 196:17 200:7,20 204:22 206:2,16 214:6 222:20 223:7,10,15 229:17 231:15 232:5 242:20	
succinct 11:17			take 23:4,17 29:6 72:13 76:7 103:2 105:11 106:12 114:15 130:14 138:6 143:3 145:4 154:4,5 155:4,12 155:15 159:14 162:12 164:1,2 183:19 189:8,22 190:16 193:9 196:17 200:7,20 204:22 206:2,16 214:6 222:20 223:7,10,15 229:17 231:15 232:5 242:20	
sudden 41:14 207:5			take 23:4,17 29:6 72:13 76:7 103:2 105:11 106:12 114:15 130:14 138:6 143:3 145:4 154:4,5 155:4,12 155:15 159:14 162:12 164:1,2 183:19 189:8,22 190:16 193:9 196:17 200:7,20 204:22 206:2,16 214:6 222:20 223:7,10,15 229:17 231:15 232:5 242:20	
sue 185:1 231:12			take 23:4,17 29:6 72:13 76:7 103:2 105:11 106:12 114:15 130:14 138:6 143:3 145:4 154:4,5 155:4,12 155:15 159:14 162:12 164:1,2 183:19 189:8,22 190:16 193:9 196:17 200:7,20 204:22 206:2,16 214:6 222:20 223:7,10,15 229:17 231:15 232:5 242:20	

312:2	137:10	281:1 283:17	273:11,18 274:9	195:9 196:1,11
tally 102:14,20	tension 125:2 128:6	305:21 313:4	274:14 275:19	197:9 198:6
target 135:7 137:7	135:3,11,19,22	314:17 319:6	278:2,5 282:15	199:13 201:8
198:20 219:7	136:3 137:18	thanks 6:11 68:3	283:18 288:2,4,10	204:10,19 209:20
targeting 242:15	tenth 174:4	106:17 114:3	292:19 295:21	211:19 212:6
targets 136:9,9,12	term 129:11 216:5	116:1 117:13,14	307:9,13 310:5,11	213:3,6 215:5,6,7
221:7	229:13 309:12	143:20 175:2	310:13,20,22	215:11,20 222:7
task 310:18	terms 8:2 13:4	180:21 182:7	311:21 319:3	223:19 224:5,16
taught 127:14	37:11 51:12	184:7 187:9	think 6:15 7:5,16	224:21 225:15,21
teach 127:11 129:3	101:22 102:16	192:15 194:14,16	9:19 10:19 14:1	226:2 227:19,21
team 6:11 203:8	105:16 134:17	196:4 222:10	18:14 21:4,15	228:7,11,18 231:7
278:16 284:14,17	142:22 147:13	225:3 226:9,10	23:6 24:5 30:21	232:12,16,17
285:8	151:10 161:3	227:7 241:12	32:12 34:12,21	233:5,9,10,15,22
teasing 21:2	164:6 169:14	262:4 281:6 309:2	35:6,7 38:9,22	233:22 234:2
technical 196:5	170:18 178:9	311:7	39:12,19 40:7	240:3 241:20
198:9 239:21	179:21 193:10	theirs 169:4	41:21 42:10 45:11	244:17 248:18
240:1 244:15	213:9 219:4	theme 285:19	51:6,19 52:18	251:7,15 253:12
247:17 249:6	223:16 225:16	292:15,20	53:4 54:7,17 56:8	255:7 257:1,14
technically 244:5	237:14 240:21	theories 70:11	56:15 58:1,3,15	261:11 264:16
291:11	253:8 263:17	theory 245:13	58:20 59:18,19	266:5 267:2
Ted 1:18 12:17	277:7 281:10	thing 11:16 32:20	62:9 63:4,20	268:18 269:6
14:15 18:1 21:5	282:12 287:21	44:3 46:11 55:8	64:15 66:10,13,19	271:5 273:10
25:8 26:17 29:16	309:3 312:1	71:22 96:10 104:2	66:22 67:1,7,17	275:3 283:11,16
42:15,18 46:1	terrific 248:16	129:17 131:17	67:18 68:1 74:8	283:21 284:9
66:5 71:5 97:12	test 134:1	133:5 149:14	74:10,13 75:10	286:10,21 287:7,8
Ted's 19:2 23:21	text 7:11,12,15	185:13 205:2	76:11 79:7 80:1	287:9,10,19 288:1
40:13	52:16 60:1 61:12	233:9 238:17	82:17 83:6 84:1,2	288:2,4,5,11
teleconference	thank 5:4,17 6:13	240:4 241:9	84:9,12,21 86:11	289:5,10,14,15,22
313:19	6:19 19:9 28:11	244:19 251:16	86:19 87:7,10	289:22 290:4
teleconferences	29:11,16 39:22	283:5 287:21	91:19 92:1,22	291:20 292:5,7,9
312:19	44:11 58:18 59:1	294:13,17 295:7	93:7,19 94:16	293:21 296:10
tell 22:21 23:15	61:6 62:19 66:16	303:10	95:6 96:15,20	298:5,7,9,21
38:18 139:3 244:2	70:22 72:8,21	things 10:18 13:11	97:14 99:20	300:16 301:8,9,15
274:12	73:1,11 86:20	24:3 27:16 38:10	102:11 114:8,12	301:16,17,22
telling 238:20	89:15 90:15 91:20	39:12 41:5,18	114:22 115:5	302:1,14 303:2,8
temperature 67:10	92:9 99:9 105:1	52:4 58:8 63:7	116:11,12,18	303:17 304:5,11
67:14	106:19 108:3	68:7 71:8 72:13	127:22 134:17	304:21 305:7
template 276:4,5	111:12,20 115:2	73:13 80:15 84:15	142:11 152:4	306:7,10,10,12,19
276:13,14	123:9 138:3,5,9	86:22 90:1,7	158:21 160:1,20	306:22 307:2,6,7
temporal 218:12	141:6 142:10	115:13,16 122:10	164:9 172:9	307:22 308:2
temporarily 208:2	143:9 146:3	128:19 137:3	175:13 176:2,11	309:15 311:16
ten 50:4 103:2	160:22 166:9	171:3 185:14	176:16 177:18	312:13 313:16
146:8 180:10	180:7,8,8 182:6	190:8 192:4 201:7	178:5,10,22 179:5	314:8 315:8 316:1
235:10	195:11 196:14	209:1 217:12	179:9,20 183:18	thinking 7:22
tenant 36:16	207:21 215:21	223:6 226:22	184:1 186:2 189:6	28:12 32:9,22
tend 124:3 136:7	222:5 232:15	247:9 264:3	190:2,9,20,22	45:8,19 84:13
tendency 70:1	278:11,13 280:15	267:10 268:4	191:7,8 194:17,18	115:3,17 118:3

184:5 223:2 254:22 274:6,15 274:18 286:20 315:16 thinks 234:1 309:12 third 27:13 91:5,10 92:13 137:8 145:7 170:13 171:16 243:2 Thomas 1:17 thought 21:1 32:5,7 32:19 47:22 50:6 92:14,21 104:10 129:2 143:21 176:7 181:2 209:2 262:5 283:5 thoughts 94:1 105:16 192:16 thought-through 317:5 thousand 246:7 threat 67:22 72:16 160:17 threaten 231:11 threatened 125:7 130:11,14 threats 68:2 103:12 163:8 three 7:6 28:1 30:9 36:9 108:13 131:10 135:21 173:20 200:21 215:8 218:15 239:1 248:8 254:8 258:1,14 266:21 283:21 285:4 289:1 299:19 threshold 170:17 throw 199:12 throwing 24:9 197:18 thrown 26:18 thumb 13:22 tie 308:3 tier 258:6 tiers 246:11,18,20	257:21,22 258:1,1 258:1,2,21 ties 74:6,14 tight 26:2 311:15 tighten 76:15 77:4 tightened 47:19 tightening 30:6 96:1 tighter 11:17 TIM 2:14 time 6:18 9:4,11 11:22 12:14 15:9 15:11 23:1,17 24:2 27:7,9 28:15 54:11 58:5,6 73:4 76:8 84:19 85:19 87:19 101:12 103:2 105:12 114:4 116:4 120:13 122:4 132:7 136:2 143:18 147:16 148:21 149:20 151:14 154:16 156:22 159:14 164:20 167:1 169:17 177:13 181:6 182:13 183:17 184:1 197:1 200:20 205:3 207:20 211:10 212:9 213:14 215:21,22 217:9 222:7,14 225:11 226:5 230:1 231:18 236:15,16 238:9 244:18 245:5,10 252:20 254:18 257:5,8 258:16 259:3,3 260:19 264:6,13 270:19 277:18 279:5 282:8 284:18 288:6 289:12 290:1 304:12 308:5 313:7 314:3	317:13 318:6,15 timeframe 287:16 287:18 timeframes 291:19 timeline 9:1 119:4 210:15 267:2 timelines 6:21 115:13 118:17 120:12 times 30:9 71:11 118:13 142:8 182:1 201:2 246:8 277:5 282:17 timing 120:9 122:8 289:12 tired 78:18 title 196:20 today 5:21 8:4 12:20 15:7,12 16:3 20:13 36:2 46:11 86:12 102:22 112:12 113:11 141:18 221:19 242:8 278:8 280:22 282:7,11 283:18 292:20 312:8 315:18 316:10 317:18 318:22 today's 310:1 316:15 told 93:13 123:13 168:10 tomorrow 9:9,12 58:6 61:12 72:20 75:4,16 76:8 101:7,20 102:6,15 104:22 105:14,17 308:15 317:11,13 317:16 319:1 ton 244:13 Tony 30:10 37:9 66:5,15 68:5,11 73:8 76:6 81:8 82:15 83:5 94:5 97:4,22 101:13 103:15 104:4,17	138:8 182:5,7 187:8,9 225:1 294:18 Tony's 72:12 97:15 tool 13:6,10 14:6 24:20 29:4 51:2 73:19 74:1,16 88:3 207:12 213:5 tools 52:13 74:18 207:8 228:2 top 100:17 126:17 147:4,16 237:2,4 237:7 topic 33:9 304:4 topics 5:20 6:6,10 8:22 total 15:18 19:3 100:9 148:6 210:4 totally 38:10 99:3 251:1 touch 274:10 touched 144:2 177:5 tough 22:19 304:12 to-date 299:9 traceability 57:1 track 105:7 128:17 139:20 290:12 trackable 187:15 tracked 202:16 tracking 305:17 traction 94:3 Tracy 4:17 110:21 110:21 232:18 257:3 262:22 272:5 trade 98:11,21,22 99:8 tradeable 38:20 tradeoffs 59:18 traditional 20:3 46:8,19 137:22 training 69:7 112:16 273:17,20 trajectory 136:17 transcript 290:11 290:12	transfer 49:18 50:15 transferred 43:12 translate 269:11 translating 248:16 transmit 120:14 transmittal 119:5 transmitted 153:3 306:6 transparency 127:2,7 transparent 169:6 179:22 travel 311:16 treat 191:5 213:22 224:17 treated 179:8 291:10 treatment 126:20 191:7 292:3 treaty 259:20 261:5 tremendous 41:17 252:22 trend 72:14 103:12 trends 7:8 12:8 29:21 76:20 81:1 171:4 229:13 trial 268:9 triangles 147:17 tribal 129:13 249:10,20 259:22 260:21 308:10 Tribe 248:9 tribes 248:7 261:13 285:2 tributaries 234:13 tributary 235:18 tricky 13:11 tried 11:8 80:20 224:1 tries 65:7 trigger 144:15 triggers 121:8 trillion 98:21 99:1 99:3 trips 218:13 troll 248:10
---	--	---	--	---

trouble 59:11	turn 117:10 122:13	38:10 39:12 47:16	unanimous 28:1	102:10 103:16
truck 294:2	155:7 166:7	48:6 53:7 58:7	uncertain 169:3	unnecessarily
true 64:9,13 70:6	174:22 235:2	59:3 60:9,14	uncertainties	308:4
131:1,2 144:4	254:13 295:18	68:20 73:5 78:20	164:22 215:12	unpublished 158:9
170:18 240:4	turned 172:17	78:21 83:20,21	uncertainty 33:18	282:21
261:15,16 271:7	173:8 288:9	85:12 87:6 89:4	33:22 212:19,21	unrelated 137:5
303:22	304:16	92:7 95:22 100:14	undermined 21:7	unworkable 287:18
truly 14:19 251:4	Turner 2:21 4:12	104:17 106:6,13	21:20 22:4	289:4
275:15	232:11,14,16,22	118:7 120:12	understand 18:1	upcoming 311:11
trust 8:9,19 258:5	241:12 249:4	124:3 127:16	26:16 39:7 94:10	update 99:10 106:2
truth 87:8	251:19 257:1	135:11,20,20	117:3 158:18	136:22 186:15
try 8:17 11:16 12:1	259:7 262:2,20	155:9 167:2 171:1	194:10 256:18,22	updates 157:2
19:8 21:4 39:6	264:15 268:18	171:12,21 175:4	269:12 272:21	upfront 270:1
54:19 58:14 63:17	271:5	175:17 181:6	286:19 296:8	291:22
87:12 108:21	Turner's 287:16	184:15 194:6	299:15 307:9	upset 69:12
112:19 113:13	turning 36:16	214:11 215:6	understanding	upside 269:20
117:15 118:2	269:20	225:5,7 233:17	13:4 74:13 77:22	upward 139:16
170:3 196:13	turns 255:5	236:6,17 243:8	117:20,21 163:7	140:7
198:7,10 204:13	turtle 148:19 149:1	248:5,9 254:10	179:12 186:5,9	up-front 222:15
207:11 216:16	149:19 155:12	257:22 258:14	262:16 288:7	292:22 294:5
217:15 219:18	159:10 160:7	260:5,14 283:15	296:12 299:14,21	urge 180:2
220:1,2,14 221:6	163:5 165:2 170:3	284:10,11 286:10	310:15	use 9:19 20:11
222:1 228:8	197:10 200:16	287:8,8 290:6	understands	53:19 57:14,19
233:19 244:8	202:10 203:16,21	two-pager 10:3	253:16	95:12 116:4
273:9 278:7	204:3 206:8,22	two-year 244:12	understood 175:8	127:11 133:16,21
298:13 311:22	208:5,17,18	type 13:19 134:21	228:19	164:19 183:7
312:15 313:18	209:13 210:6	137:19,19,20	undertake 80:3	187:14,17,22
316:19 317:15	212:9 215:13	150:9 168:3	297:9	207:3,12,13,20
trying 19:11 25:3	216:9 220:19	187:12 202:17	undertaken 144:6	214:11 228:2,4
28:18 29:18 36:12	225:22	types 113:5 145:9	292:6	231:20 264:4
46:16 48:4 51:10	turtles 132:6	165:10 171:22	underway 227:4	269:4 293:14
54:16 57:13 69:4	136:12,13 148:21	180:15 281:21	undiscovered	311:16 312:6
133:18,20 160:12	149:3,9 150:1	288:9	205:1	313:1
217:21 219:8	160:14 162:15	typical 156:14	unduly 129:21	useful 164:12
226:14,18 228:4	169:21 170:8,14	197:5	unfold 302:21	165:12 176:2,8
264:4 290:13	170:22 173:15,17	typically 203:11	unfolding 187:20	177:11 213:5
299:15 306:13	174:3,21 187:18	256:8 286:19	unfortunately	user-friendly 249:5
312:13 313:21	200:7,13,18,21	289:22 305:14	49:11 81:7 91:20	uses 164:16 177:1
318:21	202:14,19 205:1	typos 9:21	unique 161:14	198:21
Tule 4:11 234:6,22	219:1,16 220:8	T-A-B-L-E 3:1	175:10	usual 301:10
235:6 236:1,8,21	230:7,13 231:1		unit 140:3,4	usually 87:1,3
237:9,13 238:6	295:16,18	U	United 42:12 43:3	139:6,15 144:15
242:3 246:13	tweak 84:11 104:10	ugly 304:6	100:10 298:2	197:7 258:14
247:16,19 250:10	tweaked 118:14	ultimate 229:4	units 139:13,14,14	U.S 1:21 78:12 82:1
272:6 299:12	tweaker 39:14	ultimately 216:11	139:16,17	91:12 92:1 96:6
Tules 240:8	two 14:3 23:7 27:8	217:6 247:2,8	University 1:17	97:16 99:20
tuna 148:12	29:10 36:9 38:9	253:5	unknown 102:4,8	260:14 280:2

V		v.20 3:2		
v 125:17	vessel 20:1 36:22 46:3,6		W	174:18 182:22
vacated 155:15 159:8	vessels 15:7 19:17 46:7 68:20 146:21		wait 79:2	190:3 193:15
valid 90:10	209:15 210:4 297:17		waiting 5:10 78:19	206:3 211:7
validity 205:21	Veterans 1:13		waive 289:12,16,16 289:19 291:19	220:21 226:22
valuable 24:20 28:7 36:11 74:12	vetted 22:22 26:22 28:9 41:3 42:2		waiver 303:12	227:22 228:16
199:14 259:6	43:10 49:9 55:17 61:19		waiving 303:12	231:2,13 239:5
value 19:12 36:22 44:2 133:2,21	viability 239:14 269:5,8		walk 5:21	241:9,15 244:10
134:11,13,15	Vice 3:23 111:8		walking 43:4	260:5 265:5
140:6 203:1 269:9 318:10	vicinity 35:15		Wallace 2:4,4 17:22 33:2 34:11	270:20 272:11,22
Van 3:15 109:12,12 140:17 141:5,6,9	video 172:9		42:9 55:20 71:5 86:18	285:11 287:6
141:12,14 143:20	view 37:15 53:12 57:18,20 168:2		want 8:3,12,15 33:1 36:3,19 42:2	289:7 293:19
160:22 175:2	194:18,22 195:4 196:11		44:22,22 46:12	296:19 300:18
182:18,19 184:20	viewed 227:19 245:6 253:14		53:2,19 54:1,11	302:7 303:14
186:7 188:2,10	viewing 37:3		55:3,15 64:18	304:1 310:7,16
192:9,10,13,15	viewpoints 142:8 143:2		67:20 73:8 77:4,8	313:15
198:6 276:16,17	views 104:7 179:13 254:19		77:11 84:6,11,14	ways 113:14 115:4
variability 218:8	Virgin 111:16		84:18 85:14,14	115:6 117:17
varies 243:6	virtual 309:17		89:13,14,16 90:5	160:13 180:15
variety 133:20 177:8	virtually 15:4,19 16:15 93:8,20		94:14 95:12,15	195:7 203:20
various 115:13 116:17 126:12	259:15		96:15 99:11 101:9	204:9 215:3
128:8 150:13	visibility 256:10		105:15 108:18	285:21
219:9 253:1 267:7	visible 305:16		114:4 115:2,21	wearing 244:22
267:10 278:12 282:17	Vision 3:2 5:14 7:4 22:15 60:21 76:14		116:9 117:5 120:1	webinar 112:19
varying 245:7	91:16 106:4,8		120:12 122:20	123:5 158:20
vastly 260:7	visionary 84:10		136:8 137:11	195:21 277:15
venture 93:20 191:4	voice 57:10 111:10 290:13		142:7,10 156:10	281:15 313:7
venues 311:10	volume 147:18,22 148:5 149:19		175:20 194:9	webinars 312:21
verify 69:20	170:10 173:17		197:3 201:6	website 7:20
version 7:21 25:11 91:17 95:3 168:1	voluntary 284:11		212:11 228:18	305:15 312:7
versions 61:4 135:8	volunteer 101:5		230:14 244:11	WEDNESDAY 1:8
versus 50:17 101:2 137:19 223:1	voted 209:11 210:19		246:11 247:12	week 27:4 254:10
224:18 313:16			253:15 255:16	277:4
vertical 198:22 199:1 200:6			262:20 275:1	weeks 266:21 289:1
206:16			278:2 290:7	weigh 52:22 268:16
			298:19 300:15,16	270:1 298:6
			301:1 302:20	weighed 294:10
			303:9 307:17	weird 30:19
			312:22 316:8	welcome 110:13,19
			317:15,20	111:2 278:3 319:2
			wanted 7:2 22:15 26:10 35:8 44:6	went 5:7 42:12 50:1
				50:7 68:18 85:15
				85:19 107:4,4
				128:20 161:12
				186:17 201:7
				203:15,21 219:13
				232:2 238:14
				249:13,17 250:17

250:19 275:7,11 279:1,2 319:8 weren't 186:21 270:16 291:11 west 78:16 109:10 127:22 170:21 178:1 179:14 202:4,16 231:6 260:13 280:22 western 3:18 16:4 79:7 109:16,18,21 112:14 143:14 166:12 178:6 198:15,16 224:15 306:11 wetlands 73:7 we'll 11:1 30:7 53:3 61:12 75:15 77:12 83:6 99:9 106:8 106:12 108:15 111:22 142:8,20 143:3 144:9 195:15 197:2 231:17 232:6 234:18 277:15 312:6,15 313:22 314:2 317:2 318:16 we're 5:9,11,13,20 6:9 8:20 9:18,19 12:13 14:21 26:20 28:14 32:21 36:11 43:21 45:19 78:1 81:10 85:6,14 93:10 108:4,6,10 108:10,13 110:3 112:22 113:2 116:7 120:6 124:10,16 128:7 130:22 132:18 133:14,15,19 135:5 136:20,22 138:6 148:9 169:20 175:2,3 180:9,13,14 187:7 192:2 194:10 195:4,5 198:4,13	215:2 226:18 231:19 233:9 236:2 240:7,7 253:13 255:18 256:4 263:18 265:9,16 266:4,19 275:21 278:4 279:20 293:22 299:20,20 309:13 315:13 316:7 we've 27:9 51:10 70:14 91:7 105:18 106:2,4 122:3,3 127:21 130:7 131:19 133:18 137:9 143:16 152:9 160:12 173:11 183:20 191:10 192:6 210:16,16,17 222:6 224:13 225:7 226:12 233:11 240:5,6 249:15 257:6 272:14 275:19 306:20 309:7 317:17 whatsoever 20:16 whilst 156:16 white 315:3,9 316:2 316:22 317:5 who've 272:11 wiggle 50:16 wild 81:20 89:12 236:15,20 243:18 243:18,19 247:19 Wildlife 1:21,22 191:17 226:12 248:8 280:2 308:16 WILLIAMS 2:22 willing 289:16 willingness 251:8 window 256:14 266:20 windows 311:17 wins 74:8	win/win 245:2 246:22 250:7 251:4 252:19 wish 181:1 261:15 withheld 282:20 283:1 Wolford 110:17,18 112:17 232:19 240:17,17 248:19 251:6 256:6 267:2 280:17,17 282:14 282:15 287:12,13 288:19 304:11 314:8,15 wonder 182:12 299:10 wondering 58:11 184:9 187:19 227:11 268:15,17 word 22:22 23:7,8 27:15 30:19,21 53:19 58:20 92:17 95:12 wording 97:20 words 70:3 73:18 74:3 142:1 work 3:3 6:2,17 8:14 9:16,18 11:1 16:8 23:6 45:21 47:11,12 68:15,22 69:19 70:14 72:22 80:14 83:6,12 92:7 93:15,17 99:10 101:5 102:17 103:11,14 105:3 106:11 112:19 116:2 122:11 125:12 139:16 140:7 150:6,8 151:17 178:20 179:20 188:4 192:4 195:15 199:15 200:14 204:13 228:6 247:16,21 249:1 251:16 269:12,14 280:7	284:21 289:6 291:2 303:19 311:8 312:14 313:14 317:3,14 318:6,11 workable 310:17 311:3 worked 41:4 104:21 114:20 116:16 154:10 167:1 201:16 207:11 247:13 249:22 250:1 257:20 workgroup 115:16 working 6:15 7:4 7:22 9:6 12:2 49:7 52:20 69:3 85:8 103:8 106:20 108:17,19 111:22 112:2 115:6,14,19 122:4,14 178:3,6 192:1 195:16 198:8,9 201:18 206:13 211:7 221:22 227:21 257:13 277:17,19 277:22 278:6,21 279:6,21 281:12 282:9 288:17 291:21 292:16 308:8 309:6,17 312:10,12,17 315:17,21 317:15 works 34:22 44:21 144:12 179:10 272:13 285:9 304:1 work's 249:16 World 2:5 worldwide 224:4 worries 287:21 worry 11:6 worth 29:10 44:5 122:11 wouldn't 6:15 31:19 128:22	189:2 224:14 261:14 292:2 302:12 316:21 wrap 175:4 write 10:1 191:15 265:18 266:8,16 writes 264:20 writing 214:4 316:22 written 64:10,16 113:4 121:6 159:7 wrong 20:10 69:18 70:5,21 117:4 wrote 33:7 81:13 81:14,17 82:1 270:5 <hr/> X <hr/> X 242:9 <hr/> Y <hr/> Yamaha 1:25 year 36:10 49:8,8 90:8 153:10 159:6 170:11,11 189:5 200:21 211:10 227:18 238:17 242:22 254:5,7 255:8 264:3,3 267:8 275:6,17,18 309:6,7,14 311:14 years 7:6,6 23:7 25:14 38:7 41:13 43:16 46:6 50:5 70:8 78:9 127:21 133:19 165:5 183:14,21 226:9 230:8 240:6 245:8 246:8,9,18 250:11 258:6,10,15 261:12,16 yellow 47:11 131:13 235:15 yesterday 79:5 Yochem 2:5 63:11 112:5 267:16 279:18,18 283:20 young 95:1
--	--	---	--	--

\$	167:12,13	152:11,20 153:1,8	3:44 232:3	7
\$1.50 36:21	18 100:17 150:21	155:10 156:5	3:45 231:18	7 3:5 108:12 112:21
\$1.60 36:21	151:4,15 153:3	157:19,21 158:15	30 148:17 236:7	121:12 123:12,16
\$10 98:21,22 99:3	154:7,10,15 155:2	166:19 167:5,21	246:13,14	124:5,21 125:14
\$2.00 36:22	155:11 159:4,8	172:20 188:12	30,000 246:13,15	126:14,20 133:9
\$2.50 36:22	160:6 168:17	192:19,19 201:12	300 15:8,11	156:1,2 178:13
\$42 99:1	189:12 192:21	2009 201:13 205:15	305(d) 194:4	190:6 191:1 228:4
0	193:20 194:3	208:4 209:10	31 211:1,7,17,18	273:12 274:3
02 296:19	200:18	2010 73:14 150:17	212:5 216:4,11	303:20
08 153:3	180 208:3	212:7 247:15	34 153:21	7(a)(1) 124:6,14
1	1917 146:6	2011 153:6,19	35,000 19:22	7(a)(2) 124:5
1 137:19 235:18	196 3:22	158:21 252:11	36 238:19	205:16
254:12,16 260:4,6	1980s 146:16 147:6	2012 1:9 3:14 151:2	37 238:15,16	7(d) 205:17
1,000 246:1	1990s 147:6	152:11 154:13	243:10	77 191:13
1:10 107:5 108:2	1990's 255:3	155:13,13 156:4	4	8
10 307:17	1991 146:20 149:8	156:13,19 157:4	4 74:6	8:30 105:19 317:13
10:00 1:14	171:10 173:14	157:11,18 158:5	4:00 318:18	317:16 318:21
10:15 106:4	1993 149:12 171:11	158:20 159:10	4:30 108:20	80 238:7
100 161:15 163:21	1994 125:13	167:6 168:2,16	4:34 279:2	80,000 246:16,16
11 133:19 258:13	1996 143:16	169:2 173:2	4:38 279:3	800 200:18
258:15	1998 149:15,16	175:17 184:19	40 35:14 205:6	85 200:20 206:3
11th 168:19	171:15 174:4	188:19 189:21	235:9 246:14	9
114 3:6	2	192:19 193:8	258:3	9 60:6 255:11
117 3:9	2 47:10,15 137:19	238:18	40,000 209:16	9:30 105:19 106:2
12 283:1	137:20 246:14	2013 79:5	246:15,16	317:13
12th 154:3 155:3	2.2 218:7	2020 3:2 5:14 7:5	41 238:15	9:56 5:2
12:00 100:14	20 41:13 46:5 58:7	22:15 54:5 60:20	42 146:22 238:14	90 36:6 136:3
12:02 107:4	146:8 161:21	61:4 76:14 84:5	45 106:5	90s 15:5 231:7
12:15 100:14	202:8 235:13,14	84:10,15 91:17	46 151:19 153:11	91 149:14
123 3:10	240:6 261:12,15	95:4 106:4	167:12	93 173:14
13 201:17	200 15:8 17:10	215 3:25	49 238:9,14	95-day 119:4 136:5
130 126:11	234:22	232 4:14	5	98 173:14
135 120:10 121:1	2001 126:6,6	24 1:9	5,000 15:6,14	99 237:10
155:17	128:20 133:13	25 165:5	5.9 250:9	
138 3:12	147:8,11 149:16	250 15:11 16:17	5:16 319:8	
14 76:22 98:12,17	150:4 171:20	257 4:19	50 15:7 20:14 102:2	
140-odd 146:21	174:2 296:19	26 153:22 254:17	148:20 202:8	
141 3:17	2004 147:11,12	254:18	209:20 210:8	
143 3:19	150:4,6 151:1	28 255:11	235:22 236:2,9	
15 15:17 19:3 38:6	172:4 174:8	3	6	
69:7 106:6 207:17	2005 122:7 150:19	3 74:6 217:13 232:8	6 3:3 254:15,18	
231:18	167:19 172:11	246:16 250:15	60 16:9 36:6 210:6	
150 16:1,17	206:1 221:4 286:4	3,000 16:11	67 247:4	
16 128:1	2006 150:17 231:5	3.5 250:15	68H2 247:3	
17 151:19 153:13	2007 152:13	3.7 250:13		
	2008 146:22 150:21	3:32 232:2		

C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: Marine Fisheries Advisory Committee

Before: DOC/NOAA

Date: 10-24-12

Place: Silver Spring, MD

was duly recorded and accurately transcribed under
my direction; further, that said transcript is a
true and accurate record of the proceedings.



Court Reporter

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701