#### UNITED STATES OF AMERICA

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#### DEPARTMENT OF COMMERCE

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# NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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#### MARINE FISHERIES ADVISORY COMMITTEE

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Tuesday, May 12, 2009

The Marine Fisheries Advisory Committee met in the Colton Rooms I and II at the Monterey Conference Center, One Portola Plaza, Monterey, California 93940, at 8:35 a.m., James Balsiger, Vice Chair, presiding.

#### MEMBERS PRESENT:

JAMES BALSIGER, Vice Chair MARK HOLLIDAY, Executive Director TOM J. BILLY, Committee Liaison RANDY CATES BILL DEWEY ANTHONY D. DILERNIA PATRICIA DOERR EDWIN A. EBISUI, JR. ERIKA A. FELLER MARTIN FISHER ROBERT FLETCHER CATHERINE L. FOY STEVE JONER DOROTHY M. LOWMAN HEATHER D. McCARTY TOM RAFTICAN ERIC C. SCHWAAB

DAVID H. WALLACE

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## CONSULTANTS TO MAFAC PRESENT:

RANDY FISHER JOHN V. O'SHEA LARRY SIMPSON

## ALSO PRESENT:

LINDA A. CHAVES
DAVID CRABB
WALT DICKHOFF
PAUL DOREMUS
BILL DOUROS
JESSICA M. DUTTON
CHURCHILL GRIMES
TIM HANSEN
HEIDI LOVETT
PAUL MICHEL
SAM RAUCH
ALAN RISENHOOVER
PHIL SPILLER
JOHN STEIN

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

(8:35 a.m.)

VICE CHAIR BALSIGER: Good morning, everybody. So this is a large group and everybody was here at 8:30. I'm overwhelmed. Thank you very much. It makes it a lot easier to get business done. So don't take this wrong, because tomorrow I'll be late for a different reason, but it shows a lot of respect for the process and the people when you do that, so we should start and try to keep on schedule to back that up, but that's good.

So I think maybe the very first thing, we have the agenda, and it starts out, it says, "Introductions & Opening Remarks".

Well, I have just a few things to say. We have some new people, so let's go around the table and find out who everybody is. I think I know everybody's name, but I'll let you introduce yourselves just so I don't get that accent on the wrong syllable.

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1	7 But I'm Jim Balsiger. Right now
2	I'm the head for the Fishery Service.
3	DR. HOLLIDAY: I'm Mark Holliday.
4	I'm the Executive Director of MAFAC and
5	Director of Policy for the Fishery Service.
6	MR. DiLERNIA: My name's Tony
7	DiLernia. I'm a MAFAC member from New York,
8	and the City University of New York is where I
9	work.
0	MR. O'SHEA: Good morning. Vince
1	O'Shea, Atlantic States Marine Fisheries
2	Commission.
3	MR. RANDY FISHER: Randy Fisher,
4	Pacific States Marine Fishery Commission.
5	MR. SIMPSON: Larry Simpson, Gulf
6	States Marine Fisheries Commission.
7	MR. WALLACE: Dave Wallace from
8	Maryland. I represent the commercial fishery
9	industry.
0	MR. MARTIN FISHER: Martin Fisher,
1	commercial fisherman from Florida.
2	MR. EBISUI: I'm Ed Ebisui from

1	Hawaii.
2	MS. FOY: I'm Cathy Foy. I'm a
3	marine mammal biologist from Kodiak, Alaska.
4	MR. FLETCHER: I'm Bob Fletcher,
5	Senior Advisor to the Sportfishing Association
6	of California.
7	MR. SPILLER: I'm Phil Spiller.
8	I'm with the Center for Food Safety and
9	Applied Nutrition with the U.S. Food and Drug
0	Administration.
1	MR. CATES: Randy Cates. I'm
2	involved in aquaculture, commercial fisheries,
3	marine salvage, and now coral restoration.
4	MS. FOY: Yay.
5	MR. CATES: Anybody want to guess
6	why.
7	MS. LOVETT: Heidi Lovett, Office
8	of Policy. I work with Mark Holliday.
9	MR. RISENHOOVER: Alan Risenhoover,
0	Director of NMFS' Sustainable Fisheries
1	Office.

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MR. DOREMUS: Paul Doremus. I'm

L	NOAA's Director of Strategic Planning.
2	MR. JONER: I'm Steve Joner from
3	Washington State. I work with tribal
1	fisheries and one of the main items of my diet
5	now is coral.
5	(Laughter.)
7	MR. CATES: I got a bunch to sell
3	you then.
9	MR. HANSEN: That's hard to top.
)	I'm Tim Hansen, NOAA's Fishery Seafood
L	Inspection Program.
2	MS. DOERR: Patty Doerr with the
3	American Sportfishing Association.
1	DR. STEIN: John Stein, Deputy
5	Director of Northwest Fishery Science Center
5	in Seattle.
7	MS. LOWMAN: Dorothy Lowman,
3	natural resource consultant out of Portland,
9	Oregon.
)	MR. GRIMES: Churchill Grimes,
L	Director of the National Marine Fisheries
2	Service Lab at Santa Cruz, about 40 miles up

1	the road here.
2	MR. DEWEY: Good morning. I'm Bill
3	Dewey with Taylor Shellfish Company in
4	Washington State.
5	MS. FELLER: I'm Erika Feller with
6	the Nature Conservancy in California.
7	MS. McCARTY: I'm Heather McCarty.
8	I'm a commercial fisheries consultant from
9	Juneau, Alaska.
0	MR. RAFTICAN: Tom Raftican, the
1	Sportfishing Conservancy, and welcome to
2	California.
3	MR. SCHWAAB: Eric Schwaab with the
4	Maryland Department of Natural Resources.
5	MR. RAUCH: Sam Rauch, Deputy
6	Director of the Fishery Service.
7	MR. BILLY: Tom Billy, Seafood and
8	Food Safety Consultant.
9	MR. BILLY: Walt.
0	MR. DICKHOFF: Walt Dickhoff, NOAA
1	Fisheries Northwest Center, Seattle.
2	MS. CHAVES: Linda Chaves, Senior

1	Advisor, Seafood Industry Issues, National
2	Marine Fisheries Service, headquartered in
3	Seattle.
4	MS. DUTTON: Jessica Dutton. I'm a
5	Knauss Sea Grant Fellow this year in Mark
6	Holliday's office.
7	VICE CHAIR BALSIGER: So thanks,
8	everyone. We've got a few new members, and
9	I've known most of these people a long time,
0	they're out of context, so I'm not absolutely
1	sure who the new ones are. I know Ed's new on
2	this committee, Ed Ebisui. Let's see, Dave
3	Wallace, are you new?
4	MR. WALLACE: No. I'm not. I've
5	been here before.
6	DR. HOLLIDAY: From November.
7	VICE CHAIR BALSIGER: From
8	November, right.
9	DR. HOLLIDAY: New from November.
0	VICE CHAIR BALSIGER: Who else is
1	new? Erika Feller's new. Patty.
2	How long have you been on Patty?

MS. DOERR: Since November.

VICE CHAIR BALSIGER: Since November. Α special welcome to the new people, so thanks. And I'm pleased. It's nice to have some new faces. FDA, I don't know if we've ever had anybody from FDA at one of our MAFAC meetings before. We are going to have some other Sanctuary people here and the MPA person here later in the day to talk about agenda. items on the So it's quite expansive, interesting group.

I'm glad that Paul Doremus is here.

It's probably his first MAFAC meeting. We're going to talk about strategic planning, and I may have comment on this in my remarks, but strategic planning is an interesting process.

And I don't know that the plans are all that useful, but the planning part is, trying to figure out why you want to get where you're going to get and what people are thinking about. So Paul will tell us probably that the plans are important as well, but at least

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getting there is a big effort and it's useful.

So I'm going to talk a couple minutes about some of the new faces and new people we have and the transition to the new Obama Administration. As you know, Gary Locke has been identified, past governor of Washington, as the Secretary of Commerce. I haven't actually had a chance to meet him back there except to wave at him in the hallway.

Dr. Jane Lubchenco, who was a marine ecologist professor from Oregon, for Oregon State, is head of NOAA now, so she's -- the good news and the bad news is she's very, very interested in what we're doing.

(Laughter.)

VICE CHAIR BALSIGER: And so where it's good to have someone that's a biologist and ecologist and probably knows the scientific names of more fish than most people do in this room, the one she doesn't know she wants to learn before she acts about. She's interested in sampling design, she wants to

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know how the data was collected. She wants to know the names of all the fishermen involved. She wants to know everything. She wants to know all the details.

Like I said, that's the good news. The bad news is it takes time to get that done. So we're struggling to come up to speed, to know how to predict the time required for briefing her to get the materials together the first time so we know what she wants to see and what isn't wasted. So we're but I think it's learning, good to have someone at the head of NOAA who's genuinely interested in the oceans. So that's going to be good for us in the long run.

She has named a senior advisor named Monica Medina, who's an ex-NOAA lawyer from, I believe, the Clinton years. So she's back as -- probably has not settled out into -- I'm guessing, this is just me saying this -- hasn't figured out exactly what position's she's going to have in NOAA as it goes

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There are several -- if Lubchenco adopts the same structure as Lautenbacher had, there would be a deputy administer, a deputy secretary for oceans, a chief of staff, probably a deputy chief of staff, general counsel, director of legislative affairs. So there's lots of open senior-level positions in NOAA yet and obviously Monica will have one of those. Maybe she'll stay a special assistant, but there will be a bunch of new people coming into those positions as well. Of course they have not identified who they will have as assistant administer for Fisheries yet, so some of us are interested in that, too.

Let's see, other new people with an interest in ocean management: John Holdren, who's with the White House Office of science -- and what's "OSTP" stand for? Office of Science and Technical Policy, has a demonstrated interest in oceans.

Carol Browner, new Coordinator of

Energy and Climate Policy in the White House.

And then the head of CEQ, Nancy Sutley, is interested in oceans.

These are all people that have a conservative outlook, interested in sustainable use of the oceans, of the living resources, and so I think as we go through another few months it'll be a fun time to do I've actually been able to talk to MAFAC. Sutley, obviously, Monica Medina And they -- on the list of people Lubchenco. we thought they should talk to, we provided MAFAC, at least the chairs or MAFAC members, and we have a list of them, and they tend to talk to you, but they have been very, very busy, partly because trying to come up to speed on how regulations are processed. don't think it will be very far down the road before at least the chair or the vice chair, maybe the chairs of our subcommittees are hearing from and wanting to know what you're thinking about issues.

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So this week, this meeting we've got some interesting looks at some of the new evolving NOAA priorities. Marine spatial planning is kind of a buzzword, but the boss, Dr. Lubchenco's very interested in zoning of the oceans, and it doesn't necessarily mean like on land-based geography whether it's east of the street you can do one thing and west Maybe it means that, but there may another. be other ways to divide up the ocean to make sure we've got space for energy, space for space for fishing, aquaculture, space for nothing, sanctuaries, that kind of stuff.

So it'll be interesting. It's a theme area that they're looking at. Regional governance, ecosystem-based planning including how to include the coastal local leaders, all people in the of the regional planning, to the end of meeting U.S. environmental and economic requirements and challenges.

And there's a continued commitment

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to end overfishing. And of course it's not necessarily -- well, it's important, but it's in the law, so we are working on ending 3 overfishing. When -- we will get Everybody knows we're just stock 5 а new assessment away from another overfished stock, as the oceans are dynamic and things go up and things go down.

This particular administration believes that catch share programs, LAPPs and DAPPs, IFQs, ITQs, are a basic and important solution to basically every fishery-management problem. So you're going to see a huge push on LAPPs, Limited Access Privilege Programs, Catch Share Programs, as the way forward in most of our fish issues. And of course I'm a fan of those things. I don't necessarily think they apply everywhere, but I'm not sure that the boss is convinced they don't apply everywhere yet, so keep tuned on that.

We're also going to talk today, I mentioned briefly, about the strategic

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planning, and I do believe that the planning part of it is important, so we all have some idea of what we're trying to do. I don't know that we need a MAFAC strategic plan, but it's almost something analogous to that so you know what happens to the work you do here and how it has a possible impact on anything. So it's hard for a group like this or the Fishery Service or any one of our labs or centers or programs to work if they don't know what's going to happen to their product, and it's all the planning process. part of So 13 useful.

We are doing a strategic plan in seafood safety and quality. Tim Hansen's here. He will talk about that a little bit.

We are also interested in the performance metrics for the regional councils, if there's -- do we have that on the agenda -- so we're going to talk about that briefly.

Let's see. We have new legislative priorities in the 111th Congress, probably the

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top one of course is the economic issues that are going on, so we'll have an update on Obama's -- or the President's 2010 budget request. There's some interesting information on that. I don't know who's going to give that. I don't think Gary Reisner's going to get here.

DR. HOLLIDAY: Sam will.

VICE CHAIR BALSIGER: Sam's going to give that, so it may not be that interesting then because he's a lawyer.

(Laughter.)

VICE CHAIR BALSIGER: There's a chance he'll be my boss soon too, so I'd like to retract that.

So, let's see, and we're going to look a little bit at the stimulus funding. We had \$170 million we put out in stimulus funding package, received several hundred applications for that money. So that's interesting. We'll talk about that a little bit.

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Sam will also talk about the legislative agenda for the year.

Alan's going to talk about upcoming, new Fishery Service rules. We have a few policy decisions that we're making, working on some guidelines and some other things that are going on in the sustainable fisheries world.

We also have -- doing some work on NMFS and industry, NMFS and stakeholders' communications, how we communicate scientific information. We stubbed our toe a little bit in New England and so we've got some moving forward on some new communication things. So we'll talk about that down the road.

We have a couple of regional items here, which we're here and able to take advantage of that. One of them is, from the NOS, we've got people here, Charlie Wahle from the Marine -- the MPA Center -- is that what it is -- who's going to talk about marine spatial planning. I think that's tomorrow.

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The Office of Sanctuaries, Bill Douros, Paul Michel, highlights on activities and efforts at the Sanctuary on the Monterey Bay. So those are regional. But we've got sanctuaries around the country, and so it has some national import as well. So that will be interesting to hear.

And Churchill Grimes is here.

He's, as he said, from the Santa Cruz Lab,

which I thought you could see from here but

it's too far away, I guess.

MR. GRIMES: When it's not foggy.

VICE CHAIR BALSIGER: We also have subcommittees that we want to get some work on over the next three days. So we've got a lot to do. So, again, thanks a lot for showing up on time. I appreciate your attention and interest. And, with that, Tom Billy's going to take over.

MR. BILLY: Okay. Thank you very much and I'd like to add my welcome to all of you. If you've looked over the agenda you

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will notice that it follows the format that
the past several agenda used, which is to
focus on both updates that inform the
Committee, providing information that will be
helpful to us in our deliberations on key
issues or whatever subjects we may choose to
discuss both at this meeting and subsequently.

In addition to that we try to identify key issues that are front and center in terms of, in this instance, a new administration, or because of what's going on in our fisheries.

This information and focus then allows the Committee to consider what the issues are, to formulate recommendations to NOAA Fisheries, NOAA, and the Department of Commerce. And I know from my experiences in the last few years, they do listen, they pay attention to what we think, and it does have an impact.

If you look at the agenda for today, in particular the first two items are

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issues related to the safety and quality of seafood. First, Phil Spiller from the Food and Drug Administration will talk about some work that has been done at FDA to get a better handle on the risks and benefits associated with methylmercury and seafood.

Then Tim Hansen will be following up on our request to formulate a strategic plan for NOAA's involvement in seafood safety and quality and, in particular, the inspection program and other related activities that NOAA conducts.

Down at the bottom of the page on agenda you'll the first our see two subcommittee meetings. This is -- my comments now are particularly directed at some of the The strategy we've been using is new members. hear some presentations that help to us understand, provide relevant information to us, and then break into working subcommittees or working groups to allow some of the members of the Committee, whoever wishes

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participate in the various subcommittees, to focus in and decide what, if anything, MAFAC would like to say about the subject area.

And often the subcommittees will with resolution, a а set of come up recommendations that then come back to the full committee for their consideration. our first two meetings this afternoon are the Commerce Subcommittee and then the Fishery Disasters Working Group, which subcommittee by another name. It's finite, will be working -- rather than a standing subcommittee, it's got a particular subject Ιt will with area. come up some recommendations. And we use working groups for that purpose.

To go onto the second day, there's two more sessions at the subcommittee level. You'll see at the bottom it says Strategic Planning, Budget, and Program Management Subcommittee. Well, that follows on the earlier discussions we'll have that day on

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strategic planning, what's happening at the NOAA level, in NOAA Fisheries, and our thinking about deciding how we might want to be involved. It's what we wish to do in this subject area, or recommend to NOAA in that regard.

And then we've talked about the Ecosystem Subcommittee which will focus on the concerns about global warming, acidification of the oceans, and perhaps other topics that we'll hear about over the course of this meeting. And, again, come back, because if you then turn to page 3 you'll see in the morning we're going to hear from the chairs of the various subcommittees and the working group on what they recommend to the full Committee for consideration.

And we'll, as appropriate, vote on any resolutions or other -- deal with any other suggestions that they may have come up.

That's kind of the process, and I wanted to go over that, in particular, for

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some of the newer members.

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We'll try to wrap things up by four o'clock on Thursday. As you know, I work hard at sticking to schedules and I think it's important for all of us. And I'd be happy to entertain any questions or comments you have about the agenda?

Anyone? Bill.

MR. DEWEY: Tom, with some of these committees we're going to have I think transition and leadership on these committees, maybe you want to discuss about chairmanship of those committees and how we're going to deal with that?

MR. BILLY: I'll defer to Mark or Jim for that.

DR. HOLLIDAY: So the last meeting in November we discussed this rotation, as a number of the committee chairpersons were actually rotating off the committee at that last meeting, so we recognized the need for new members.

1	We asked you to indicate your
2	interest and willingness to serve as a
3	committee chair by emailing or contacting me.
4	And Jim was going to provide some feedback at
5	this meeting as to the persons who would be
6	taking over for those subcommittee
7	responsibilities.
8	So we're going to meet, sort of
9	pass the torch, and from the next meeting on
0	we'll have the new committees' chairpersons in
1	place. So we'll be dealing with that
2	transition at this meeting.
3	MR. BILLY: And that comes up, I
4	think, on the third day.
5	DR. HOLLIDAY: Well, by then it
6	will be yeah.
7	MR. BILLY: Yeah, at our MAFAC
8	administration. Okay.
9	DR. HOLLIDAY: So I had a few
0	administrative issues
1	MR. BILLY: Yeah, Mark.
2	DR HOLLIDAY: that just might

be on your mind and things that are important to the pointy-headed bureaucrats.

This is a public meeting so members of the public are invited to attend. We publish notice in the Federal Register, so people may be coming. I've had some indications of people asking for directions, time and place. We have a gallery for them to sit and watch.

There's a public opportunity for comment on the last day. Rarely is that taken advantage of, but just so you know, again for some of the new members, that members of the public are welcomed at these meetings and are able to have part of the agenda at some point, an appropriate point in time.

We are recording the meeting. We have a court reporter. Hi.

THE REPORTER: (Waves.)

DR. HOLLIDAY: And what I would ask, especially this morning, the first time that you speak, if you could indicate your

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name and preface your remark with your name so that we can get names and locations and sound checks all properly recorded for the recording.

If you haven't signed it, you're not a MAFAC member but you're a visitor, either a guest speaker or just attending the meeting, there's a sign-in sheet that we're required to maintain lists of people who were physically at the meeting. That's on the table outside, if you can cooperate and sign it with your name, please.

In terms of briefing books, in accordance with our paperless environment we're trying to minimize the amount of paper, and so we posted as much possible on the MAFAC -- our website. If you have a laptop with you and you haven't had a chance to download it, we have a couple of thumb drives that have all of the presentation materials that we received to date. And so well pass that around and let you borrow that and copy to your hard drive,

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if you'd like that.

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Bathrooms are out this door and then to your right, so we'll be taking a couple of breaks every day. A ten o'clock break, we'll have coffee. I think this morning's was a little late because I heard a huge crash at about 8:05.

(Laughter.)

DR. HOLLIDAY: I think that was the cart with the coffee on the way to our room and they had to restart and make that over again. But it should be here tomorrow. Before we start there will be some light refreshments in the morning and afternoon at the breaks, at ten o'clock and around three o'clock.

Lunches, we're going to have -will approximately have an hour for lunch.
There are a number of different places you can
walk to and be back to pick up a quick lunch.
Fisherman's Wharf, we'll point people in the
right direction. It's a five- to seven-minute

walk. You can grab a fish sandwich or some calamari, and get back here in time. So we'll have lunch every day.

Subcommittee meetings, there's brief switch. The breakout room, we have two rooms, and these are going to be simultaneous meetings. So this is called the Colton main Behind this wall, and the entrance to room. it is around the corner, is the breakout room. And this afternoon we're going to switch because we're going to need the projector for the Fisheries Disaster Working Group. Fisheries Disaster Working Group will stay in this room the other, the and Commerce Subcommittee, will meet next door to That's the only change in rooms. But tomorrow, again, the subcommittees, between this room and the one next door, you can't get lost too easily.

And, lastly, Tom, I'd like to burden you of talking a little bit about tonight's reception.

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MR. RAFTICAN: Okay.

DR. HOLLIDAY: And I didn't tell you that in advance, but...

MR. RAFTICAN: Fair enough.

This evening we've got the opportunity through CARE, California Artificial Reef Enhancement Program, and the Sportfishing Conservancy and the Monterey Bay Aquarium have opened up a reception from 7:00 to 9:00 p.m. this evening at the Aquarium.

If any of you have not seen the Aquarium, it's really world class. It's a pretty impressive place. There will be hors d'oeuvres there. It's not a full dinner, but there will probably be fairly heavy hors d'oeuvres there. For those of us that run nonprofits, that will fill in for dinner.

(Laughter.)

MR. RAFTICAN: But, anyhow, you're all welcome and we'll see you there at seven o'clock. And, again, it's just an awesome place.

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DR. HOLLIDAY: So in terms of logistics, a number of us have rented vehicles 3 to get to and from the airport. I've got a I'll be meeting people in the lobby a little bit before seven o'clock and I can make a couple of trips. If you have a car that you're willing to volunteer and take people with you, I'd again recommend you show up in the hotel lobby probably quarter of, 6:45, quarter to 7:00. And we'll make -- I'll make 10 at least two trips to make sure that no one's left behind.

It's a long -- you could walk it.

It's a mile and a half, but it's a healthy walk. But we'll -- you can walk there or we can give you the lift and back. So the plan would be meet in the hotel lobby about quarter of. We'll get people there.

Okay, questions? Oh, Larry.

MR. SIMPSON: Additionally, on the deal tonight, I've rented a car too, so I'll be there with transportation for three people.

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On Friday I'll be driving back to San Jose Airport. Anybody took a shuttle and 3 wants to ride back, they're welcome. Just see me. HOLLIDAY: And Jessica DR. excuse me, Larry. MR. SIMPSON: I'll be leaving about eight o'clock or so. DR. HOLLIDAY: Jessica has a list 10 of people, your itineraries. And so if you're looking to match up with somebody and you're curious, you can check with Jessica about the latest news that we have about when people are going back to the airport, if you're either offering a ride or looking for a ride. MR. BILLY: Okay. Thank you. Any other comments or questions? Okay. Well then let's swing into the next item on the agenda which is under the broad category of Seafood Safety and Quality. It is a presentation to be provided by Phil Spiller from FDA on a project that FDA has

been working on for, I guess, the past three years.

A little bit of transparency first. I was involved in this project for one year when it first started about three years ago. I was contracted with by FDA to help plan how to carry out the work and involved in with a team that worked on the initial thinking and investigations that carried were by various experts at the Food and Drug Administration, but I have not been involved for over two years now.

A little bit of history. Back in the late 1960s a Professor Duffy from one of the New York universities analyzed several cans of tuna and found methylmercury. And methylmercury is recognized as a toxicant and there had been incidents prior to that in other parts of the world that raised concerns and triggered work by the Food and Drug Administration and others to quickly come to terms with the presence of methylmercury in

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seafood and put in place regulatory controls that were appropriate to the time and the information that was available.

So now almost 40 years later we know a lot more about methylmercury but as important or perhaps more important, beginning in the '70s and increasingly focused on in the '80s, researchers started to look at the benefit of seafood, and in particular, the omega-3 fatty acids in seafood but other constituents of seafood as well.

And NOAA played a very active role in that process. Most of you probably are not aware that NOAA manufactured the fish capsules that were used by many of the NIH researchers that studied the effects of seafood and the fatty acids, in particular, omega-3 on cardiovascular disease and other diseases that were looked at and are continued to be looked NOAA made millions of capsules that were at. in large clinical trials and used studies over several decades.

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Now a lot of that work was reported on back in 1985 when NOAA sponsored a seafood and health conference where researchers reported on their findings to that date, and it was becoming clear that there were significant benefits from seafood in the diet.

That started to trigger then some questions about, well, wait. If there's methylmercury and other contaminants in seafood, yet when you measure or monitor the impact -- health impact of seafood in the diet, you see positive effects, how do we explain this. How do we get our arms around what's going on here.

And eventually the Food and Drug Administration decided to carry out a special project that looked hard at this question and as part of the process developed a whole new science for how to consider the combination of the adverse effects and the beneficial effects in sort of one equation, if you will, in one framework.

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And so that sets the stage then for Phil Spiller's presentation. Phil has indicated that if you have a question for clarity, as he's making his presentation feel free to raise the question. We'll have some time for discussion after he finishes. And then we will obviously have an opportunity to discuss it in much more detail this afternoon at the subcommittee meeting.

So with that I'd like to provide Phil the opportunity to make his presentation.

MR. SPILLER: Thank you.

I certainly appreciate the invitation that I received to come here and present our work to you. And so I am here today to describe an effort by the Food and Drug Administration, which I have been a part of for the last several years.

(Comments about the slide projector.)

MR. SPILLER: I want to describe for you our effort to develop and to also

implement a new way for evaluating the health consequences of eating commercial fish.

Our focus is on commercial fish because the Food and Drug Administration has got some boundaries put on it by law as to what it can look at and what is outside the scope of its jurisdiction.

jurisdiction for food safety with regard to fish goes to commercial fish, but not with regard to things like sports fishing subsistence fishing or or localized situations. So you'd be -- the constitutional term is Food and Interstate But that's what it means. Commerce. It's of the nationally-representative sort regulatory structure.

FDA is a regulatory agency, so consequently our traditional focus has been on determining whether a food may pose a health risk due to a harmful substance in the food. In the case of fish we were looking specifically at methylmercury with regard to

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this project.

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But I can tell you that over the years a number of concerned scientists and managers, including myself, at FDA became concerned that the methodologies that we had been using and, quite frankly, are used worldwide to consider risk and to try to measure risk from environmental contaminants in fish such as methylmercury really provide - and I will explain this a little bit later - an incomplete picture of risk.

We're forced to risk-manage and, in some respects, groping a bit in the dark. And that has been troubling to a lot of us and so, consequently, we were extremely interested in taking another look at how we consider risk for environmental contaminants such as methylmercury to see if we could come up with a methodology that would help fill in some of our gaps.

As we started into this project, we became more and more aware of research, which

I will discuss also later, on beneficial health effects from eating fish. And it dawned on us that if we wanted to do this all the way, -- I need to go -- could you go back?

MS. LOVETT: Yeah, I just hit a button there, so it is working.

MR. SPILLER: Okay. Thanks.

MS. LOVETT: Here we go.

MR. SPILLER: Okay. Thanks.

We wanted to also see whether in our exploration of a new methodology, of a new way of looking at risk, we could also take into account whether the food might also be beneficial to health and explicitly beneficial to health in ways that might actually affect the very risk that we are concerned about.

And after a few years of exploration and a fair amount of trial and error we felt that we had come up with a methodology which I will describe. We decided to call it a risk and benefit assessment methodology. And the question that we then

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had to ask ourselves was: Do we stop now and simply submit a report to our agency that we think that there is another methodology that could be used, or should we go ahead and take a try at it. And it just became irresistible for us. And, well, you know, it's what we do.

And so we decided to give it a try with the blessings of leadership at the Center for Food Safety and Applied Nutrition and also FDA. So, consequently, what started out as a project that we thought was going to last somewhere between six months and a year ended up taking -- Tom said three, my last count was -- close to four years to produce what we thought would be a draft that would at least be good enough that we could show it to the public and give the public the opportunity to comment on that draft.

I can tell you that before we made the draft public we went through -- for me -- an excruciating round of internal review by senior scientists within the Center for Food

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Safety and Applied Nutrition, integrating their comments into the draft.

After that we then went through an external peer review process in which we found nongovernment scientific experts, mostly in and academia in some of the medical professions, to give us a peer review of our risk and benefit assessment. We received that and integrated in the comments of that. We then went through what was called an interagency review by other federal agencies in the government, and we received a lot of comments from a number of agencies.

of the agencies One that participated in that was the National Marine Fisheries Service and including two folks who here today, Walt Dickhoff and are Linda Chaves. And we are and remain extremely grateful to them and to NMFS for the highquality review that they have provided us and the input and the comment that they gave to us, which we all took -- we took into account

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as we went forward to produce a document for publication.

And there were other agencies as well. NIH was involved, CDC was involved, EPA was involved. All agencies gave us comments and we took into account the comments from all of them before we went forward with the draft.

And issued the draft we In fact, the document was so long January. that we decided to break it in half. the big risk and benefit assessment. The other, we started out deciding that we wanted to try to provide people in an appendix with plausible biological at least а basis, scientific basis, for why the current state of the research is showing -- consistently showing health benefits for breeding commercial fish. And there was so research on the subject we decided we would attempt to inventory the research. became so extensive that we realized that our summary public research major of was а

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document in and of itself. And so, consequently, we published that one also as a separate document.

we put it out for comment, like I said, in January. We gave the public a three-month public comment period, which ended April 21st. To be perfectly transparent about it, we still have comments that are coming in and at some point we will, in fact, have to cut off the comments because we will have to move on. But right now, comments that are straggling in, we still are happy to accept.

And we have received up to now hundreds of comments; we have received a memo from academia, we have received them from researchers, we have received them from various advocacy organizations, we have received them from industry organizations, we received them from governments and government agencies. And we're happy to get them all.

So I'm now going to mention methylmercury almost for the first time. You

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won't see methylmercury in the title of the assessment, and that is by design. And that will become clear later on.

Certainly we started the project in order to better meet our regulatory responsibilities relating to the presence of methylmercury in commercial fish. And, for that reason, the assessment focuses on three health areas for which methylmercury in fish could potentially be a risk factor in the United States based on the results of at least some research studies.

The areas that we looked at, the areas that we assessed, were fetal neural development. And by "fetal neural development," what we mean by that is effect on the developing nervous system of the fetus as а result of а mother commercial fish containing methylmercury and passing along both the methylmercury and the beneficial nutrients from the fish to developing fetus.

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The other effects that we looked at were fatal coronary heart disease and fatal stroke in the general population. And what we mean by that is the risk from eating fish, all of us eating fish, having a fatal heart attack or a fatal stroke. Methylmercury has been associated with those two conditions in at least some research studies. The data for CHD and stroke is not as strong as it is for fetal neural development, but it is there and, consequently, we felt an obligation to take as hard a look at it as we possibly could.

Just some very quick methylmercury 101. Fish is the primary route of exposure to methylmercury. If you're itching to get your dose of methylmercury you are going to have to eat fish to do it.

And we all, in fact, have got methylmercury in our systems; every one of us.

Even people -- it was discovered -- in a CDC survey, people who claimed that they ate no fish still have some small amounts of

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methylmercury in their system.

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Methylmercury is essentially in all fish. It is naturally occurring from geologic and biological processes. It has always been there. Human beings have always been exposed to methylmercury. For that reason I, just as a personal note, I have to tell you that I tend to wince whenever I hear somebody state certain species of fish that а is "contaminated" with methylmercury. The fact all fish of the matter is contain methylmercury, at least in trace amounts, and they always have.

There is no evidence so far, although admittedly, the evidence that we do have is limited -- I'm not going to claim that it's extensive -- of increases in levels of methylmercury in marine species, even though methylmercury is now being added to the environment as inorganic mercury from human activities.

The likely reason for the no

evidence of increases so far, at least in marine species, is that it takes a fair amount of time for methylmercury -- excuse me, for mercury to reach the water, then to descend to various levels within the water, to go through a process called methylation where it converts to methylmercury, and then it works its way up through the food chain to get into fish.

That doesn't mean that it will not happen. And that methylmercury levels in marine species, will not in fish, fully expect that they will. increase. Ι It's just that we have no evidence of it yet, but think that, quite frankly, Ι it's inevitable.

Just to give you a sense for how much methylmercury are in commercial species of fish, and this will be important later on as I go through the presentations. The fish with the highest levels of methylmercury have, on average, about one part per million in the edible tissue. Those are the long-lived,

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predatory fish, fish like shark, swordfish, king mackerel, and a few others.

To give you a sense for how that compares to commercial fish in general, we look -- we did the calculation to took a figure out what an average commercial fish contains in terms of parts per million methylmercury. And we did it on the basis of -- we weighted for consumption. In other words, because the shrimp is eaten a lot more than, like, some other species, we counted shrimp a little more than that we would a species that's very infrequently eaten. what we came up with was that the average commercial fish weighted for consumption contains a little more than an order of magnitude less methylmercury than at the highest species, on average.

All fish, and all species, contain methylmercury in a range; the predatory fish, some are going to be over one, some are going to be under, but one is your mean, and, if so,

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consequently all fish will either be slightly over or slightly under 0.086. But that, again, is the average for all commercial fish weighted for consumption. I will remind you of especially that bottom number, 0.086, because it will be germane.

First of all, I want to address the issue of the neurotoxicity. Methylmercury is definitely a neurotoxicant. In humans, neurotoxicity became extremely well established as a result of some severe poisoning events in the mid-part of the 20th century in Japan and Iraq.

In Japan it was caused by the dumping of industrial chemicals including methylmercury into the Minamata Bay, it got into fish and the levels in fish just skyrocketed, probably higher than has ever been seen and hopefully will ever be seen again.

In Iraq, it wasn't from fish at all. The exposure, in fact, was from eating

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the grain that was used to make bread, and the grain had inadvertently been contaminated with a fungicide containing methylmercury. So fish consumption was not involved at all.

The in exposures those two poisoning events ranged from a low of about 40 times average U.S. exposures to several hundred times average U.S. exposures. to sort of round it off and say it was in about the ballpark of 100 times current U.S. exposures to methylmercury.

The general population was adversely affected with neurological symptoms to the point where it looked like, and in fact, could reasonably be called an epidemic. The symptoms ranged from the mild to severe and included death.

And one major discovery from these events was that methylmercury could be passed from the mother to the developing fetus, and the fetus was often much more sensitive to the adverse effects of methylmercury that was the

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mother. The mother might be mildly affected, when the child was born the discovery was made that the child was now extremely adversely affected.

It did not always work that way.

Sometimes, oddly, it would work in reverse while the mother was significantly affected and the child was only mildly affected. But as a general rule the fetus was, and should be, regarded as more sensitive to methylmercury than an adult.

These events in Japan and Iraq are really what continue to provide the evidence of a heightened fetal sensitivity, at least at extreme exposures.

So the question then became, for researchers, well, it's their fetal sensitivity at much lower exposures, the kind of exposures that we might be experiencing? Are people being affected at our levels of exposure? And the issue of fetal sensitivity is the issue that really drives the

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methylmercury concern in the United States, and has for many years. It is not the only concern with regard to methylmercury but it is the big one; it is the real driver.

Researchers first started looking for subtle effects at lower levels of exposure, but they still wanted levels of exposure -- they try to look for populations which, certainly, were not exposed at times U.S. levels, because those don't exist. Those were just in the poisoning events. some people eat a lot of fish and, result, normal exposures in their day-to-day lives are considerably higher than average U.S. exposures.

So researchers started looking around the world for places where such exposures exist because people eat a lot of fish. And they found the place is like some very isolated fishing villages on the coast of Peru. They found the fishing Native American people up in Quebec. They found populations

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in the Seychelles Islands in the Indian Ocean, in the Faroe Islands of the North Atlantic, and also some subpopulations in New Zealand were the ones that were looked at first.

And the exposures in each one of these cases were, on average, about 10 times average U.S. exposures. And the way they would go about doing the study -- and this is germane, because virtually all studies and all data that went to our risk and benefit assessment come from these type of studies -where they take their study population and they try to compare the differences on the results of neurodevelopmental tests given to children who were more or less prenatally exposed to methylmercury within a population. In other words, they would see whether or not the children who receive more exposure to methylmercury did less well the on neurodevelopmental tests than did the other children in the study group.

The differences that have been

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found so far at these levels do not show anything resembling retardation or severe neurological damage. The effects that they find on these tests when they do find effects tend to be very, very subtle and within the realm of normalcy, but nonetheless there have been effects have been found in the Faroe Islands and New Zealand, especially in the Seychelles Islands they did not.

One thing that you should know is that the results from the Faroe Islands most specifically, and also a bit from New Zealand, form the basis for current risk management in the United States and virtually elsewhere in the world. So risk management and evaluation of risk, to this day, come from exposures at those levels.

And that includes our risk management focus which is consumer advice that we last revised in 2004 for the protection of the fetus and for young children. And we added young children to the advice because

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their nervous systems are still developing just as a fetal nervous system is still developing.

The advice does not focus on or try to protect folks other than that at that particular level. We were looking at protecting very sensitive subpopulations. The general population, we have been much less concerned about in terms of their sensitivity and in terms of the amount of methylmercury that they been exposed to, or that they are exposed to.

The advice basically recommends that pregnant women, women who might become pregnant and nursing women should avoid shark, swordfish, king mackerel, and tilefish. Those are the commercial species with the highest methylmercury on average. The average in the range of about one part per million, as we described previously. The advice also recommends eating up to but not exceeding 12 ounces of a variety of fish per week.

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Twelve ounces represents a lot of
fish per week, in the United States. Ninetyfive percent of women of childbearing age will
eat below 12 ounces. Only about five percent
will eat, in the United States, about 12
ounces. We also recommend that -- and
remember the 12 ounces. That's another thing
to keep in mind. I will come back to that.

Our consumer advice also recommends not exceeding six ounces a week, this is for albacore canned tuna, because it contains more methylmercury in it then light canned tuna.

So that is the only advice that we give with regard to eating below 12 ounces. The 12 ounces applies to all other commercial fish.

We recommend that young children follow this advice also, but that they eat smaller portions.

One of the reasons why I ask you to remember 12 ounces a week is so you can compare it against what women of childbearing

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age actually eat. These are the results of a recent FDA survey of over 1,000 women of childbearing age all across the country. Of those who were surveyed, the non-pregnant women of childbearing age ate roughly about three ounces of fish per week. The pregnant women surveyed reduced their consumption further down to about 1.9 ounces of fish per week.

The survey implications are that fish consumption is generally low in United States, but we already knew Second, that women who eat less than 12 ounces a week before pregnancy, again, about ninetyfive percent of women often reduce their fish consumption further when they even get pregnant and there are other surveys that have come up with similar outcomes to confirm what our survey showed.

A fundamental question which you can ask is: Okay, so fish consumption is low and women who become pregnant eat less than

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women who aren't pregnant. But from a public health standpoint is that something worth concerning ourselves about or is it just perfectly okay? And that's an important question, and one that we spend a lot of time considering.

One of the reasons why we started considering it, that much more after this particular project started and before was because since the consumption advice issued in 2004 and since our risk and benefit project started later in that very same year considerable amount of research has been largely focused published that is on the effects of maternal fish consumption and the results of the effects of maternal fish consumption on the mother's child's neural development.

And of these studies have focused more on fish consumption than they have to exposure to methylmercury. What happens to the child if the mother eats more fish? If

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the mother eats less fish? In some of the studies they measured the methylmercury levels in both a mother and a child at some point, but in a number of studies they were just looking at fish consumption.

Two important features of that research that I'd want to point out -- in the populations that are now being studied the levels of fish consumption in exposures to methylmercury have been down at US levels. Some of the studies have, for the first time, been in the United States. Other studies have drawn on rather extensive databases in the United Kingdom and now also in Denmark.

So for the very first time, -- and this did not exist when we started our project -- for the very first time we have data for research studies at our levels of exposure and our levels of fish consumption. And I regard that as incredibly important. A very dramatic development, actually.

And, second of all, a very

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interesting feature of the studies was effect of the FDA-EPA consumption advice on 3 the study designs. There has been -- as we have discovered, they didn't come to us and ask us, they just did it, an interest reality testing the consumption advice comparing the results from those who eat over 12 ounces of fish against those who ate less than 12 ounces of fish while pregnant in their 10 study populations to see what is 11 consequence of eating more or less than the 12 ounces week that's in our consumption а 13 advisory.

The results, generally, are what you see there on the screen. First of all, the research studies are consistently finding a beneficial association between maternal fish consumption and neural development in their children. That means, quite simply, the more fish mothers ate the better the kids test scores as a general rule, even though the fish contained methylmercury.

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Moreover, when they are compared between the over and under 12 ounces a week, there was a consistent finding that benefits tend to be higher when fish consumption is above 12 ounces a week in their study populations than when fish consumption is below 12 ounces a week.

Nonetheless, --

VICE CHAIR BALSIGER: Tell me when you finish. I'm sorry. I thought there was a question period.

MR. SPILLER: Sorry. Okay. However, that does not mean that methylmercury is irrelevant to the results of these studies. fact, one of the things that In researchers are consistently finding is that the amount of methylmercury that is in the fish and that the people are being exposed to does have an effect on the size of the benefit.

For example, there was one study where there was relatively high fish

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consumption -- one group, a subset within the study population had relatively high fish 3 consumption, but they also had not that high methylmercury exposure. And their benefits, their neural developmental benefits greater than those who ate about the same amount of fish but they're methylmercury exposure was higher because, apparently, there was more methylmercury any fish that they were 10 eating.

So the amount of methylmercury in the fish can have a bearing on the size of the benefit. In our minds, it could potentially, depending upon the mercury-to-fish ratio, even offsets and cause an adverse effect. And that something that extremely was we were interested in and it's something that wanted to take a look at in our risk and benefit assessment.

But, again, the results of all of these studies collectively suggest an overall effect from eating fish is the product of both

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1	a methylmercury deficit and a fish benefit.
2	And you can potentially and this is what
3	intrigued us and why we couldn't resist
4	leaping into it you could measure in
5	advance, potentially, what that net effect was
6	going to be.
7	I'm sorry. Did somebody have a
8	MR. BILLY: So just to put it in a
9	little different words to make sure we
0	understand, your current advisory, that is an
1	advisory from a public health agency, may be
2	doing public health harm to the fetus the
3	child, because you are recommending that they
4	eat no more than 12 ounces a week?
5	MR. SPILLER: Are there any other
6	questions?
7	I talk about that, actually, a
8	little bit later. I don't think I get to it
9	quite the way you did. But I sort of fancy
0	dance around it a little.
1	MR. SIMPSON: Thank you, Mr.
2	Chairman.

Philip, I'm trying to scroll through -- I can't remember the guy's name. It's a Dr. Nick something from --MR. EBISUI: Ralston. MR. SIMPSON: -- from North Dakota. MR. SPILLER: North Dakota, that's correct. MR EBISUI: Ralston Clinical. 8 MR. SIMPSON: The key problem here 10 is we're looking at methylmercury and we should be looking at the synergistic effects of selenium. And that based on his recent research -- and I heard him present it last Thursday at that brownbag lunch, stay away from pilot whales and sharks, you are doing good -- you should eat fish. But it's the selenium not the methylmercury that we should be looking at. 18 19

And I think, maybe, we should be concentrating a lot more of our research on that, that action -- the interaction of the selenium.

MR. SPILLER: I know Nick, and he and I do stay in touch. And I find his -- I encourage him in terms of the research that he's doing and to keep up the work. But I'm also frank with him and it is not easy, as he has found out and that we have found out, to design a research studies in human beings to test that hypothesis.

It is a lot easier to do it in research lab animals and a lot easier to demonstrate it chemically in the lab, that the interaction, chemically, between selenium and methylmercury.

But I have told him that until he can demonstrate it in humans, it becomes very, very difficult for us to do anything more than simply encourage his continued research.

MR. BILLY: Okay. I want to get through the presentations.

MR. SPILLER: All right.

MR. BILLY: I'm going to -- that's all right. Points of clarification? Erika.

MS. FELLER: When you put up there, sort of, the trends of women in general decreasing their seafood consumption, --

MR. SPILLER: Yes.

MS. FELLER: -- I found myself wondering, is there any information about, sort of, the cultural or ethnic background and are there differences between people from different cultural backgrounds or different geographies? Because I mean a lot of times the amount of seafood you eat is a function of where you are from.

MR. SPILLER: Um-hum. I think I've seen two published studies, and then again the FDA survey, which honestly was a telephone survey, and it does not profess to be representative of the entire United States because being a telephone survey was not entirely random, however, it did have a very large population of people that they called. So, -- and the result was basically in the ballpark with what we've seen in the others.

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The others, I think, were -- one had to do with a -- it was a survey taken by Harvard researchers of people, I think, who came into a clinic over an extended period of time in the Cambridge area.

The other one was research that was done at the University of Maryland. This is a growing area of research. I think your question is a good one. My guess is that the research has been more basic than that and has not gone, yet, into those kinds of differences, although it probably should.

MS. FELLER: Okay. Thank you.

MR. SPILLER: It's a good point.

In any event, all of this -- during the course of our project, certainly not when we started our project, but probably about midway, we finally started asking ourselves this question: Given that the effect of eating fish on neural development is not solely controlled by methylmercury in the fish, because methylmercury certainly can't be

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what's causing a neural developmental benefit.

We know it can't be the methylmercury, it's a

3 toxin.

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We have to then ask ourselves what is the overall effect. And the term we use in our paper is the "net effect" of eating fish, taking into account both an adverse contribution from methylmercury and a beneficial contribution from fish, presumably from the nutrients in fish.

This is a relatively new question As I have indicated before, our for FDA. current risk management approach is based primarily the methylmercury's on adverse contribution to that net effect. In the development of our consumer advisory and the development of all of our risk management strategies over the years -- and this is not just in the United States but we realize this is what everybody is doing worldwide. beneficial contribution from fish to the net effect is not estimated. It was not estimated

by us for purposes of our consumption advice.

Nor is the overall net effect taking into account both the methylmercury contribution and the beneficial fish contribution, nor was that estimated by us for purposes of our consumption advice.

The net effect might be different. It might be not as adverse from the methylmercury contribution. It might -- the methylmercury contribution might be -- there might be a countervailing force from the benefit that actually means that the adverse effect is reduced.

On the other hand, the net effect could turn out to be completely neutral. No health effect whatsoever, pro or con. Or the net effect could turn out to be beneficial. And this would depend, we figured, on circumstances and would not always be the same depending upon what you eat or what type of fish you ate.

The fact that we did not look at

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these things at the time that we developed our consumption advice basically reflects the state of data as of early 2004, because at that point research studies were really only looking for associations between methylmercury and neural development at not only -- and not for associations between fish consumption, whatever it may be, and neural development.

And there's the difference.

An association with fish consumption would be treating fish more as a package that contains methylmercury but also beneficial nutrients. And that research really did not start -- or at least in terms of appearing in the published literature, until after we issued our consumption advice in 2004.

The current risk management strategy of simply looking at the methylmercury contribution to the net effect also reflects the approach, what we call the safety assessment approach to evaluation of

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risk, that was so concerning to a number of scientists and managers at FDA from the early Where in the safety assessment, 3 days. generally, what you are trying to do is come up with a single level of exposure to the 5 adverse substance in question, in this case the methylmercury, a single level of exposure that is sufficiently low that it can be deemed to be without appreciable risk. And you 10 assume that if people are exposed to at or below that safety assessment level, -- we will deemed them to be without appreciable risk. 13 We have not actually measured that risk, we have not actually estimated, we are going to deem them to be without appreciable risk.

If they are above -- exposed above the safety assessment level, the safety assessment itself, the process of safety assessment, does not estimate what the risk is. Those who are exposed above, safety assessment cannot tell you whether their risk is substantially different than those who are

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exposed at or below.

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The nickname that I have given it is that if you are above you are in the "no opinion zone." The safety assessment literally has no opinion on that subject because it just does not estimate. That, to me, is a shortcoming of safety assessment for purposes of managing risk for methylmercury, because there are people in the United States who are exposed above safety assessment level, and we don't know the risk.

If you -- by the way, just as a piece of information -- because of this is something that you probably have heard and I'm sure you're going to hear again: You're going to hear that some number of babies, some number of thousands of babies are born every year in the United States at risk of neurological harm.

The term "at risk," what that actually means is that those are the number of babies who are born to mothers who are exposed

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somewhat over a safety assessment level. In other words, their exposure is in what I would call the "no opinion zone."

You can judge for yourself whether or not at risk and no opinion might be the same thing to you. They do not, frankly, in the same thing to me. When I think about at risk, I think that there is a significant risk that is unacceptable and that something needs to be done about it. And I think that's the way people react to it. I don't know if there's any survey research that's ever been done on this, but I think that would be normal human reaction to that term.

The fact is that the risk to those people was not estimated by safety assessment. And that to me was one of the big holes in our understanding that generated this project, because we wanted to fill in that gap, we wanted to get a much clearer picture of risk at, below and especially above via safety assessment levels that exist for methylmercury

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in the United States and in the world.

The Environmental Protection Agency has got one called the reference dose, FDA has got one also called the acceptable daily intake level. And we wanted to understand our own -- the effect of eating above our own level and the effect of eating above other levels that have been established by other agencies.

In 2006 a panel of the Institute of Medicine of the National Academy of Sciences decided roughly the same thing, that it was time for a change — that safety assessment was no longer adequate, and that just looking at the methylmercury contribution to the net effect was no longer sufficient. And so, consequently, the Institute of Medicine issued a report called Seafood Choices, Balancing Benefits and Risks that went on for many hundreds of pages and covered a lot of ground, but also made these statements, specifically, that new tools apart from traditional safety

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assessment should be developed focusing on risk benefit analysis, a better way is needed to characterize the risks combined with the benefits.

This is, by the way, a study conducted by the National Academy of Sciences that was requested and supported largely by the National Marine Fisheries Service, and we thank them for that. To this day, I think that they -- we developed a lot of insight with the -- the Academy said a lot of good things that were important, and especially this.

And it is always nice -- and you always have to agree with the National Academy whenever they agree with you. And as it turned out in 2006 we went, 'Holy cow, we have actually started doing this.' So it was -- from our standpoint, very supportive and encouraging and made us feel a little bit better, that maybe we were at least attempting to head down a track that other people

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thought, aside from ourselves, was important.

Whoops, I think I might have jumped
-- I might have skipped one.

What I would like to do is describe briefly -- and then I'm going to skip a bunch of rather technical slides, but this will give you the gist of it -- our approach to modeling what, again, what I have called the "net effect" for fetal neural development.

We wanted -- and these three completely separate risk assessment The first estimate, we wanted to estimates. estimate the methylmercury contribution to the net effect as if fish had nothing to do with There was no way that the benefits from it. fish could adversely affect or reduce in any way the toxic methylmercury contribution. We wanted to know what it was in its purest form. And my, sort of, fantasy hypothetical, the way I explain it is imagine that you eat no fish ever again as long as you live, but every morning you wake up and you pop а

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methylmercury pill. This would be the methylmercury contribution to the net effect.

It's the best way I know how to explain it.

So constantly what we were trying to do was look for data on a methylmercury where fish was not involved. And, in fact, we did find such data.

The second thing we wanted to do was estimate the beneficial fish contribution to the net effect. That is a little bit more difficult to do because all fish contain methylmercury, so it's very hard to find what the fish contribution would be without methylmercury.

We were able to come, I think, reasonably close, but there is still -- in the data we used, which came from England, there was still methylmercury in the fish. probably are low-balling the beneficial estimates somewhat, probably not too much, but little bit, because it probably а confounded by methylmercury to some extent.

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We just have to live with that. There are always going to be uncertainties and risk assessment and you just have to be transparent about them and accept it, and if you get better the next time around you do it again.

The third thing that we did was we

took the estimate of methylmercury contribution and the estimate of the beneficial fish contribution and we combined them in an assessment to estimate the overall net effect. I have got several slides which go into some detail on each one of those three. I'm going to bypass them and give you some time back. And what I'm going to do is go to the net effect punch line.

MR. BILLY: Bill, you have got about 15 minutes.

MR. SPILLER: Okay. That's about all I need. And these are just slides that I'm skipping.

Okay. These are the results from our net effect neural developmental modeling.

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And we modeled it several different ways, and I'm going to give you a number of different results which, hopefully, collectively, will paint a picture for you.

The first thing we wanted to do was measure the net effect in the United States of what we call "baseline." Baseline is simply what women of childbearing age are eating in terms of the amount and types of commercial fish and what their exposure methylmercury. Some eat less fish -- well, most eat less fish, some eat more fish, some -- many eat fish that are low in methylmercury, fish that higher some eat are in methylmercury.

So the data actually -- there is a bit of a lag. This was what we ended up taking a look at, because this was the best data we could get at that time, we're upgrading it, was 2005 data. So this is what was going on as of 2005, and, again, when we finalize the report, we will update it.

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Here are the net affect results:
What we found was that about 99 percent of children born to women in the United States probably experience a net benefit, similar to but slightly smaller than the fish beneficial contribution. You did not get to see what that was because that was in a previous slide.

But the unit of measurement that we devised for this project, with the assistance from some of our expert peer reviewers, was a neurological effect that would be the size of an IQ point. Actually, I'm not saying that right. What I mean to say is that the size of the neurological effect is compared to the size of IQ effect.

So if we had a neurological effect that is very, very small, for example, we would estimate it as being -- and this is what we did, we would calculate it as being, say, at two hundredths of an IQ point. It would be the size equivalent as if you had lost or gained two hundredths of an IQ point, or it

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could go up higher. It could go, actually a size being over an IQ point. It could be the equivalent in size of a gain or loss one or two or three or four IQ points. And the reason why we chose IQ to compare the results to this because everybody has a general understanding of what IQ is.

Some of the other terminologies that we came up with, our peer reviewers said, "Well, some of us may understand this, but very few people will. You have got to come up with a better unit of measurement." So we came up with, basically, we compared everything to the size of an IQ effect.

The 99 percent are probably experiencing an effect that would be somewhere within -- somewhere less than a single IQ point. The better -- but for a number of them, beyond around the 95th percentile -- or not -- the last five percent of people, the people who are eating the most, five percent who were eating the most fish would probably

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experience a benefit that would actually exceed one IQ point and that could go as high as two to three to four to five IQ points in the extreme.

However, the better part of one percent of the population would probably experience no net effect whatsoever. The risk and the benefit for them would balance out.

One tenth of one percent of the population probably are experiencing a net adverse effect, but the methylmercury effect for them is exceeding the beneficial fish effects and resulting in an adverse neurological effects equivalent in size to about four one-hundredths of an IQ point loss.

We then came up with another way of looking at it, which we nicknamed the "modified baseline." And sometimes things happened serendipitously. We kind of the blundered into this modeling almost by accident, but then when we took a look at we went, hmm, this is interesting. Maybe we're

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learning something from this, and so we kept it.

In the modified baseline -- this is a hypothetical situation. One of the fun things about risk assessment modeling is you can reinvent the world. It's just whenever hypothetical you want and all of a sudden that's the way the world becomes for you in your modeling.

In this reinvention of the world, women of childbearing age experience actual exposures to methylmercury, the very same exposures that they are currently experiencing at baseline, but they eat only fish that are low in methylmercury that have the -- that contained the average amount of methylmercury for commercial fish.

Remember that number of the 0.086 parts per million, which means that in order to achieve the same exposures as they now have a lot of them would have to be eating a lot more fish. So they're getting the same

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exposures to methylmercury, but they are only getting it through eating low methylmercury fish, equivalent to what is in the average fish.

results interesting. The are Through the 99.9th percentile of fish consumption, which means that -- what 99.9 percent of everybody eats, the net effect is beneficial and just goes up. And when you get that high, to the highest percentiles of this consumption, the benefits are in the multiple IQ point size range. They are no longer at a fraction of an IQ point, they are higher than that, as we say in the second bullet. The most benefit is equivalent in size -- well, it Like I said, the most benefit is -- no. associated with the highest levels of the fish consumption, exposure to methylmercury through the 99th percentile, it exceeds a point.

So, consequently, what happens is that as exposure to methylmercury goes up -- this is -- it's sort of counterintuitive when

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methylmercury goes up, the IQ benefit is going
up. And the IQ benefit is going up because
people are eating more and more and more fish,
where the benefit exceeds the deficit because
the fish are low methylmercury fish, because
they average 0.086 parts per million. I
cannot emphasize that enough. That is the big
difference between the modified baseline and
the baseline.

At baseline you have got this adverse effect in a small segment of the population, and the best explanation we can come up for it is these are people that are focusing on very high methylmercury fish.

This is the difference: When you don't eat a lot of high methylmercury fish and you are down around the average, you do -- you no longer see an adverse effect, at least in our modeling.

We modeled a number of what we call "what-if scenarios." And I will try to run

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you through these as quickly as I can, because
they really do help fill in the picture.

Again, these what if scenarios are just
hypothetical inventions; what if people did
this? What if people did that? And what we - what you are going to see here in the slide
our population shifts and neural development
stated as equivalent to size of a certain
amount of IQ shift.

And the first thing we wanted to do was we wanted to know what is going on at before baseline hypothetical make any we shifts. And we wanted to know whether or not as a consequence of eating fish in the United average neural development, States represented by test scores and IQ, is better than it would be if women ate no fish. And estimate from our assessment our baseline of eating fish is better than eating no fish, and that is equivalent in size to about a quarter of an IQ point, roughly.

Again, the entire mean IQ of the

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United States is higher by about a quarter of an IQ point as a consequence of eating fish. And that is our estimate.

consequently, the next So, hypotheticals are what happens to that baseline quarter of an IQ point as a result of eating more or less fish and of different types of fish. In the first one, women do not exceed 12 ounces a week, but they could eat less than 12 ounces a week. other words, for 95 percent of women already eat less than 12 ounces, they keep doing what they're doing. And the only shift in the population, the only change, are the five percent of women who are eating above 12 ounces a week, they have got to come down to precisely 12 ounces a week.

So the question is: What does that do to the national IQ average? And we see that it declines slightly, by 100th of an IQ point below baseline. And that is simply caused by a decline of five percent of the

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population making a shift in downward, in the amount of fish they eat.

In the second hypothetical, -- and you're going to like this from a fisheries management standpoint, this will drive you nuts -- all women of childbearing age eat exactly 12 ounces of fish per week.

Now since we know that -- as we saw that most people are eating somewhere around three ounces and less per week, getting everybody to eat up to 12 ounces of fish per week means -- it raises some serious issues about fish supply. But in our hypothetical we don't worry about things like that, that's your problem, not ours. Everybody is eating exactly 12, which means that 95 percent have to come way up in their fish consumption, only five-percent decline. And what we saw was the most significant increase in neural development of a baseline of any hypotheticals. What we saw was a population shift above that .225 IQ point at baseline and

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it increased by 0.57. In other words, it increased by over half an IQ point in size of effect.

MR. BILLY: Bill, you've got about five minutes.

MR. SPILLER: All right. That's because of the substantial increase in consumption.

In the next two we fiddled around with both how much they eat and how much methylmercury was in the fish. The women do not exceed 12 ounces of fish, but can eat less, but all fish that they eat are low in methylmercury and, at this point, we're slightly above average, were at 0.12 ppm.

advisory on steroids, because it's much more stringent. In the consumer advisory women are allowed to eat fish that exceed 0.12 parts per million, but they're not allowed to eat over 12. So this is actually more stringent in terms of the amount of methyl mercury in the

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fish. It is more protective than the current consumer advisory. And we saw that the size of the average benefit, in fact, declined slightly. It is an extremely small decline, but it is a decline nonetheless.

What did in the last we retain hypothetical was the amount  $\circ f$ methylmercury in the fish. We retained that limitation. They could only eat fish that had 0.12 parts per million. But we completely took off the limits on the consumption, and that they could eat as much as they wanted, or as much as they currently do. And there we saw a major change in there the size of the -we saw an increase in benefits above baseline.

So, as a general rule, the more fish you eat the more benefit you get. But, again, it depends upon how much methylmercury there is in the fish. There is that relationship between the amount of fish you eat and the amount of methyl mercury in the fish that is determinative of whether or not

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you get a benefit or whether you do not.

I'm going to do coronary heart disease and stroke at a very rapid rate.

We also looked at these in the terms of what is going to be the effect of eating fish on the risk of fatal heart disease and fatal stroke in the general population of the United States.

We did not attempt in this one, unlike neural development, to measure methylmercury contribution to the net effect. And the reason why we didn't do that time around is because the data for methylmercury being a risk factor for coronary heart disease and stroke is not robust. data, but it is the data are are conflicted, they are contradictory, they go a number of ways. And, in fact, there are only a small number of studies that are available And the studies -- each one of the to us. studies has got issues associated with it.

On the other hand, the number of

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studies that looked at fish as a package and tried to measure what was the consequence of eating fish on coronary heart disease and stroke it's -- comparatively speaking, it is off the chart. You have got studies from all over the world. You have got literally hundreds of thousands of study participants.

And you can assume that the fish are a package in the sense that they contain methylmercury and they contain beneficial nutrients. And so, consequently, they at least give you a sense for whether or not methylmercury is a significant risk factor in — by causing fish to be risky or not, for coronary heart disease and stroke.

And so, that's what we decided to do. We decided to assess the relationship between fish consumption and coronary heart disease and stroke. And that's the question that we asked; is that having -- this is it averting, causing or having no effect on CHD and stroke deaths per year?

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And here is the punch line.

And I think it's dramatic, but I was not terribly surprised by it because I am aware, I've read through the research studies that exist on this, and they do really go very largely in this direction.

Our coronary heart disease model estimates that fish consumption in the United States today is averting somewhere in the vicinity of 30,000 deaths per year. In stroke, we're looking at about 20,000.

We do have a caveat in that one of the models shows the small possibility of some number of deaths caused by fish consumption at one tail of the -- of what is called the tail of the distribution. But it doesn't really tell us why. It doesn't tell us whether or not that is genetic or whether it is caused by eating fried fish versus broiled fish or whether it is caused by some risk factors having to do with lifestyle or that sort of thing. But what it does is give us pause that

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this is something that we ought to look at in the future. It does not predict the cause.

I won't give you a summary. I assume you have got it all. You've got it.

Just to give you the next steps really quickly, we are in the process right now of reviewing the hundreds of public comments that have come in and, to this day, still come in. And we still, like I said, welcome them. We are going to revise on the basis of the public comments.

Plus we went back to our original, outside-the-government expert peer reviewers. We've said we changed the draft so much since the first time you looked at it, we're going to let you look at it again and give us another round of comment. They did that, and so we're now wading through the public comments and our peer review comments.

We're not going to be done after that. We are going to retract and then submit it all one more time for comments to our Food

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Advisory Committee. And that that will be a public meeting, and I'm sure it will be an event.

We will then revise on the basis of the comments that we receive from them. We will undoubtedly go through another round of interagency review. We will then, presumably, finalize the drafts.

And only then -- and this is an important consideration, because I think there has been a tremendous amount of misunderstanding on this point: because only then will we sit down and review whether or not we need to make any adjustments whatsoever in our risk management strategy.

People are constantly asking, well, but you are showing some new change in policy in your documents. And the answer is no, we're not. This is a -- it's a risk assessment. It is going to inform future risk management decision-making as well any number of other things, but there is no change in the

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current advisory there and none currently is contemplated. All of that, whether or not it would be changed or never changed, is a matter that's down the road.

And, hopefully, I'm not too far over. So, I thank you for your time today.

MR. BILLY: Thank you very much.

I'd like to provide opportunity for members of the Committee to ask questions, comments.

Randy.

MR. CATES: I'd first like to say really informative talk. it a Ιt was surprised me that some of the numbers I saw up there seemed really low in consumption. Ed would probably agree that in Hawaii our consumption is much higher which explains why people from Hawaii are a bit smarter than others.

(Laughter.)

MR. SPILLER: As in they're in Hawaii and we're not.

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MR. CATES: I have a couple questions. The first one is I think it's real important for outreach from the FDA on these results. How will you do that? And an example I would give, my wife's physician on our two sons at birth completely advised of no consumption of fish during pregnancy and afterwards.

And only because I'm in the industry did I start pulling out some of this data. I had to really lay it on the table, so I think it's real important for outreach.

The other question is: Can an adult body flush mercury or is it once you have it in there it stays there?

And the third question is: Does NOAA or the FDA have a testing program for our fisheries so we can actually get a government agency to test and find out the levels?

MR. SPILLER: Let's see, first of all, I share your concern about medical advice. My wife is a doctor and so she is

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constantly coming back and telling me about what she hears from other physicians. And how we handle outreach is I think at this stage a somewhat delicate matter.

I mean we are interested in the results of this work being known. On the other hand, the results are entrapped and so consequently I don't want to go around miscommunicating or having people think that this is some kind of final government assessment and this is simply the way it is. And so I think it's a delicate matter and we have to figure out -- and I agree with you, though, that I think we need to do a better job than we have.

I'm sorry. What was the second question?

MR. CATES: Can our bodies get flushed out?

MR. SPILLER: Yes. Methylmercury has a half life of about 45 to 50 days, so if we all stopped eating fish right now we would

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simply start shedding methylmercury over time.

So that is true.

And in terms of a testing program, yes, the Food and Drug Administration has a testing program that it's had for many years.

And, as a matter of fact, the results of those tests, we're talking about levels of methylmercury at least in commercial species of fish has been augmented from time to time with important data that we've received from the National Marine Fisheries Service and from NOAA, so it's been a good partnership in that regard.

I can't off the top of my head give you the website for where our database can be located, but we have it posted on the web. We've had it up for years actually. And every year we take more samples and we try to fill it out a little more.

MR. CATES: One quick follow-up.

That's the first time I've ever heard of a half life. I think that's a huge, huge piece

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of information for the public that would calm a lot of fears. I think this information is actually going to make our job harder, it's going to increase demand.

MR. BILLY: Ed, you had your hand up earlier.

MR. EBISUI: Earlier I wanted to make a comment about -- there was a question or a comment from I believe it was Erika about cultural practices. And I wanted to ask Phil if that -- my recollection is that the Faroe Island study, one of the studies that sounded the alarm about mercury, I think down the road it was discovered that the high levels of mercury was because of pilot whale consumption. Was that the study?

MR. SPILLER: Yes. It was not down the road. I mean they were very upfront about it, that they do eat a lot of pilot whale or at least they did at the time. I don't know whether they still do. And they ate fish also, so it was essentially a combination.

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the consequence is that effects that they were seeing in the Faroe Islands were not clearly the result of the net effect of simply eating fish and having the benefits do what the benefits do and the methylmercury efforts do what the methylmercury effects do as a consequence of fish consumption. And this I think is one of the significant differences between the Faroe Islands study and the study of the Seychelles Islands where the methylmercury exposures were they were about ten times about the same, higher than they were in the United States, but in the Seychelles the results were solely from fish, they ate no pilot whale.

In the Faroe Islands you're getting much more of a methylmercury effect and much less of a beneficial fish offset as a consequence of high consumption of pilot whale in that study population, because pilot whale simply did not contain the same types and amounts of nutrients as the fish that they

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were eating do. So that is true.

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MR. EBISUI: One more, please. And didn't the Kaneko and Ralston studies show the ratio of selenium to mercury in pilot whales were disproportionate, much higher mercury than selenium?

MR. SPILLER: They did.

MR. EBISUI: They did. As opposed to like the larger pelagic fish, the common commercial fish where you have mercury levels which are exceeded by selenium levels.

MR. SPILLER: Correct.

MR. BILLY: Tom.

MR. RAFTICAN: Thanks, Phil, for the presentation. You talked and focused on commercially-caught fish and I just have a couple of questions relating to applicability and coordination with EPA on recreationally-caught fish.

I know that the FDA issued a joint advisory with EPA I think somewhere back around 2004. I just question the degree to

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L	which you think that these results here might
2	be applicable or not for recreationally-caught
3	fish given differences in concentrate and
1	catch and consumption behaviors, and whether
5	EPA has been a party to this effort and
5	whether you would anticipate further joint
7	action with EPA?
3	MR. SPILLER: The advisory is a
9	joint advisory. I mean it's used to simply
)	contain advice about essentially commercial
L	fish. And the concern back in 2004 was
2	consumers distinguishing commercial fish from
3	other fish. For a lot of people fish are
1	fish.
5	MR. RAFTICAN: Well, and at that
5	time there were different standards as well.
7	Weren't there different risk levels applied
3	between EPA and FDA?
9	MR. SPILLER: Not really. That
)	would take me about a week.
L	(Laughter.)

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MR. SPILLER: The point being that

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it was felt at the time in 2004 that an ideal consumer advisory would contain advice both 3 with regard to commercial species of fish and with regard to noncommercial species of fish. And so, consequently, if you take a look --5 and I admit my slide did not include that, but it also -- because I was focusing on the FDA end of it and the commercial species end of it which is our jurisdiction -- the consumer 10 advice contains both advice with regard to species commercial and with regard noncommercial species and simultaneously 13 became a joint advisory.

Our view is that there may potentially be significant differences between commercial species of fish and how they are generally consumed by people and the types of fish that would be consumed recreationally and from subsistence fishing which would tend to emphasize very localized kinds of conditions, localized what types of fish to what was in those fish, how much methylmercury, how much

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of beneficial nutrients were in those particular types of fish, and the extent to which the people in that area were at least emphasizing those types of fish, the localized fish in their diet or whether that was just a small part of the diet and they were also eating commercial fish.

So for all of those reasons we came to the conclusion that localized conditions like that probably warrant their individual assessments. And that's why we commercial made our assessment on essentially nationally-representative a And said that assessment. we extremely regional and localized assessments really have to be left to another day because they involve potentially unique and very localized sets of considerations that would not apply national basis.

MR. RAFTICAN: So just the last part of my question: Has EPA then not been involved in this as a collaborator at all?

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We briefed EPA a MR. SPILLER: couple of times at the beginning and during the course. On a couple of occasions we asked them some questions, but we were basically focusing on human food safety of commercial fish, which is essentially FDA an responsibility. So the question was can we meet our own responsibility, and the answer is, yeah, we thought we could.

Where EPA was heavily brought in, most heavily brought in, aside from the fact that they were briefed and informed along the way was in what I referred to at the beginning of the presentation as interagency review. I focused, because of the audience, on NOAA's participation, but I also mentioned that the other agencies involved were EPA, CDC, and NIH.

tell you that have can we received, part of the public as comment, comments from one division within an office studying within EPA. those And we are

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comments very closely. And they will get another whack at it after that, as will NOAA also.

MR. RAFTICAN: Thank you.

MR. BILLY: Bill.

MR. DEWEY: Phil, earlier this month there was a USGS study that was released that showed an increase over approximately the last decade in the North Pacific an increase in mercury levels in seawater of about 30 And there's some controversy at percent. least in the press around it because they weren't looking at actual seafood, they were looking at seawater. And apparently there was an earlier study that showed there hasn't been an increase in mercury levels at least in tuna 27-year period of time. over a And I'm curious if you can comment on that. Why we might be seeing an increase in seawater but not in fish.

MR. SPILLER: I think you're seeing an increase in seawater. I'd be amazed if you

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didn't, frankly. Just a personal opinion.

MR. DEWEY: Right.

SPILLER: And I think you do MR. because of all of the human activity there is now, especially coal-fired power plants that are sending mercury into the atmosphere and a lot of it settles into the water. reason why I think that you're seeing an increase in seawater that we, and based on admittedly limited data, have not yet seen an increase in methylmercury concentrations marine species is because it takes some amount of time, potentially a significant amount of time -- although that's subject to scientific debate -- between the time that the mercury enters the aquatic environment, basically sinks to a very low level in the ocean, goes through a process called methylation where it transforms from mercury, inorganic mercury into organic methylmercury, and then slowly works its way back up through the aquatic food chain to the point where it's taken in by fish

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like tuna. My own feeling is that what you're seeing is a time lag.

MR. DEWEY: So based on your understanding then we do have something to be concerned about, but it's a while down the road yet? It doesn't --

MR. SPILLER: I don't know how far down the road. That is subject to debate, but

MR. DEWEY: But you're going to start to see it increase in seafood --

MR. SPILLER: -- we haven't seen it yet, at least in the data that we have. It is my personal opinion that it is inevitable. Ι just don't see how we could be doing what we're doing, we, humanity, in terms of the amount of mercury that is being pumped into the atmosphere and into the aquatic environment without at least at some point down the road increases and potentially significant increases in the of amount methylmercury in marine species of fish.

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I mean I think you probably already see that, although FDA would not have the data for it. And in enclosed bodies of water, fish 3 in enclosed bodies of water in lakes and rivers and that sort of thing, I would expect that those levels have been already affected. I'd be amazed if they haven't. MR. DEWEY: Thank you. 8 Two more quick MR. BILLY: Okay. questions and then I'm going to close it out. Ι remind everyone that at the Commerce Subcommittee meeting this afternoon Phil will be available and we will have an opportunity to dig into this more and determine what MAFAC would like to recommend or react to what they've learned this morning. So, first Dave. I was wondering is MR. WALLACE: the half life in humans of 45 to 50 applicable to fish also? MR. SPILLER: I don't know.

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MR. WALLACE: Well, that's good.

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MR. SPILLER: I have no idea. MR. WALLACE: If it is then as the 3 SPILLER: I think they just MR. keep taking it in. MR. WALLACE: As long as they don't accumulate it then the level may increase but it's not going to increase a great deal. MR. SPILLER: Only because they're shedding it as they -- I suspect that it will, just my own best guess on it is that I think see potentially significant that will increases down the road. I think it's coming. MR. BILLY: Okay. Martin. MR. CATES: Increases of? MR. SPILLER: Levels of methylmercury in commercial species of fish. just don't know, I mean I've seen one 18 estimate where, I mean this is like a modeling estimate where people tried to model how long it would take from the time that it entered the aquatic environment to the time that it

was picked up by fish, and the estimate was as high as several hundred years.

Now there have been other estimates that are quite a bit different, so I can't possibly pass judgment on those estimates. I just think that it will happen eventually.

MR. BILLY: Martin.

MR. MARTIN FISHER: Phil, thanks a lot for coming today. You did a great job. My question relates to mariculture aquaculture. It's my understanding that the way that tuna get to be carriers of the mercury is they eat a large amount of forage fish and the forage fish have a lot of interaction with enough mercury.

So if the food base for open-pen fisheries is going to be wild stock like herring or menhaden or whatever forage fish that is going to be captured for processing for fish meal, aren't we kind of going in the wrong direction in terms of implanting into a new food service a high level of

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methylmercury?

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MR. SPILLER: The food source being what you're feeding the fish meal to?

MR. MARTIN FISHER: Right.

MR. SPILLER: If there was --

MR. MARTIN FISHER: And let me just give another thing to that. Through the processing process of fish meal, methylmercury also is released and sometimes is introduced; is that not correct?

MR. SPILLER: What I can tell you is that there was a study, I'm trying to remember what country was in it, it might have been Sweden, it was one of the Scandinavian countries, where they were puzzling over the phenomena of people claiming to eat no fish whatsoever, some percentage of their population, and yet they had methylmercury in their systems. And where did that come from? How could that be?

And the best explanation they were able to come up with is it came from the fish

1	meal that were being fed to terrestrial
2	animals, chickens and that sort of thing, and
3	that they were getting these were very
4	small amounts of methylmercury the people had
5	in their systems, very low, but nonetheless it
6	was like where is this coming from. And that
7	is what they came up with, is it must be
8	coming from the fish meal.
9	MR. MARTIN FISHER: Is that an
0	answer to my question?
1	MR. SPILLER: I think so. It's the
2	best I got.
3	MR. BILLY: All right. I'm going
4	to move on.
5	Thank you, Phil. Thank you very
6	much.
7	The next item is a follow-on from
8	Tim Hansen, who will oh, I'm sorry a
9	break.
0	(Laughter.)
1	MR. BILLY: I just got pinched.
2	Not so wound up about this. A break. Let's

take a quick, 15-minute break. (Recess taken from 10:30 a.m. to 3 10:51 a.m.) MR. BILLY: Okay, I think we'll get See how much more you appreciated started. the break when you thought we weren't going to get one? Alright. Next we have Tim Hansen. 8 A couple of meetings ago for a variety of 10 reasons Tim came to MAFAC and made presentation, an initial presentation to talk about the work that NOAA does in seafood safety and quality, the Voluntary Inspection **1**3 Program, and other related matters. At the last meeting we also had the opportunity to have a speaker from FDA who shared some of the things that were going on in FDA related to this same area of seafood 18 safety and quality. MAFAC asked NOAA Fisheries

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develop a strategic plan that would take

account of the changes that were going on at

the federal level in this broad arena as well as the policies and approach that NOAA felt was most appropriate given these things, looking to the future.

So with that I'm going to turn it over to Tim and he can share with us where they stand on their strategic plan and other related considerations.

Tim.

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MR. HANSEN: Okay. Thank you, Mr. Chairman. We have developed a plan which we think has all the elements that NOAA needs to have in place to properly address seafood safety. I've got to tell you it probably needs a little editing, and we promised our senior leadership to get it in the final form within a month or so, but I think for the purposes here, you've got everything you need to see just to get started here.

I guess it was last July that we met in New York City and then subsequently in New Orleans. And we decided to put this off a

little bit because there were unknowable things that were occurring in the seafood safety arena: The new administration; 3 we had some new legislation that empowered another agency to get involved, which I'll get 5 into; and many other things that we really wanted to have come clear before established this plan. 8

So we worked together as a group.

We had three brainstorming sessions, and I certainly don't do this alone. We had a great group of people: Myself; and a Regional Chief Inspector, Eric Steiger; we had two Scientists from National Seafood Inspection Lab, Calvin Walker and Tony Lowery; we had Tom Huang and Dr. Walt Dickhoff from the Northwest Fisheries Science Center; and Linda Chaves, who's advisor to Jim, all work on this.

And knowing how the Vision 2020 document was developed, we sort of used the assumption that we envision that we're reading in the newspaper in the year 2020 and these

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things at NOAA Fishery have occurred.

Also, since I didn't develop any of this by myself, I've taken an opportunity of not doing all the presenting today, so I'm going to have Linda Chaves do some presenting.

Linda's a long-time leader in policy and trade development in NOAA Fisheries and sort of served as a visionary, which is a right handy thing to have when you're trying to hatch a strategic plan. So she's been integral in getting ideas out on the table.

But also Walt Dickhoff is going to present as well. You know I think I've mentioned in past meetings here what terrific scientists we have in NOAA Fisheries, and Walt's one of them. And he's going to explain some of the scientific goals and objectives that we've cooked up here.

Okay. Here's just roughly the contents of the document. We'll spend some time talking about the context for seafood safety in NOAA Fisheries, why we care about

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the seafood safety, the seafood supply itself.

Question whether the seafood supply is at
risk. Talk about consumer confidence and some
international requirements.

There will be a short discussion on regulatory oversight, which I think I touched on in the past and will again briefly today. And also we have a series of program goals and objectives, which is the essence of our plan.

And with this I will hand this little piece of machinery over to Ms. Linda Chaves, who is going to talk about setting the stage for seafood safety.

MS. CHAVES: Thanks, Tim.

I'm a little nervous about him hanging all of the visionary stuff on me. It really wasn't just me. But, okay, so we actually started talking about the goals and objectives, but then decided we really needed to provide some context for why all of this is important. So why do we care, other than the fact that we want to know that what we buy in

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the store is safe?

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First of all, the Agency has responsibility for managing and conserving fisheries. And we have to contribute the seafood supply for the domestic market and we're also interested in exporting, and of course it's got to be safe.

We want to make sure that what we eat whether or not it's imported or produced domestically is safe. And we also want to make sure that whatever information is out there is accurate because, as has been mentioned already, there's an awful lot out there which is not totally accurate.

And Phil gave a great lead-in about the potential health benefits of seafood. And what we're seeing is that the research that has been done within the last few years, in particular, there is increasing evidence that seafood benefits outweigh the risks and that we should all be eating a lot more seafood and that, in fact, and I won't go into this, but

there are an awful lot of possible savings to the nation from reduced healthcare costs.

Seafood supply, we're importing an awful lot more seafood in the last ten years: 600,000 more metric tons, worth \$6 billion more. We're now importing from over 150 countries, many of those are developing. Their systems are not anywhere near as robust as ours when it comes to seafood safety. by 2030 we'll need an additional 1.4 million weight seafood if metric round tons continue eating at the same per capita level that we are eating today.

So the numbers here aren't important. What is important is if you take a look at the countries where we get most of our seafood -- China 23 percent, Thailand, Canada is a big one, but Indonesia, Vietnam, Ecuador, Mexico, and an awful lot of countries up there that one would consider as being developing countries -and that's where the proposition of the seafood that we eat in this

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country comes from.

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And I know that some of you have seen this slide before or a variation of it before, and unfortunately Tim was the one that tried to explain it, but I don't think he had seen it very long before he had it, so let me try to go through this once again.

If you take a look at our harvests, the red line here, that is both a harvest for consumption and for industrial use. Let's throw it all up there and see where we are.

Then we export between the red line line, and the green so that the generated by what we produce in this country, it from aquaculture or wild-capture be fisheries, goes down here. What we consume is this blue line. So, as has been said in some place if not already later on, there's some discussion about the fact that about 80 percent of what we consume in this country is coming from imports.

We decided to go out to 2030 and

assume that our harvest levels return to the highest levels they've ever been since 1980, which is right around here, and assume that our exports remain constant, and that's one that could go up, could go down, depending on what market prices are around the world. And we assume that per capita consumption would heeding remain constant, not the recommendations to eat more seafood, and the population growth figures were conservative that were used.

So what happened there is that we're going to need this much seafood in 2030, which is a delta of this, which was, as I said a moment ago, about 3 billion pounds, about 1.4 million metric tons of seafood, and that's going to have to come either from domestic production or imports. And given what we know about wild-capture fisheries, they're probably not going to be increasing a whole lot more significantly. So a lot of it's going to be coming from aquaculture and probably from

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1	other countries. But right now this is what
2	we're importing, and a lot of that is coming
3	from aquaculture already.
4	And this is just to give you an
5	idea of what we're going to be dealing with as
6	far as the seafood supply in the United States
7	that we are going to have to address whether
8	or not we produce it here or we get it from
9	somewhere else.
0	Any questions about that one before
1	I go on?
2	Okay. Oh, one thing I had here is
3	that everything was in round weights.
4	MR. SIMPSON: We keep getting this,
5	you know, good for you and we're importing and
6	we're eating and everything, when is the
7	economics going to help these guys out?
8	That's what killing us. You know, the
9	economics of it.
0	MS. CHAVES: That's a different
1	discussion.

(Laughter.)

MS. CHAVES: Okay. And so inspection has an awful lot of challenges in this area.

Eighty percent of what we consume is imported. That's around 2.3 million metric tons per year. That's finished product. FDA inspects about two percent of those imports only. Now it's not two-percent randomly, across the total. Where they know that there are problems, they will increase the inspection, say, for products coming from China.

But our Inspection Program inspects 40 percent of processed product. Now that includes product that has been harvested in the United States, is consumed in the United States. It also includes product that is harvested here and exported. But it is also product that comes into the United States, where you have somebody like Kroger that insists that the seafood they're going to sell has been inspected by our program.

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And I know this whole 40 percent, two percent, gets confusing to a lot of 3 people, and Tim will probably talk about this. BALSIGER: VICE CHAIR That 40 percent, that's like a sampling program. 5 So like 40 percent of the fish are not looked at It's like a load comes into Kroger and Tim's group takes a look at some of that. 8 MS. Correct, but using CHAVES: 10 sampling methodologies and taking the right number of samples. MR. HANSEN: Yeah. We use sampling plans and from the sampling plan we don't look at every fish or every piece of fish. MS. CHAVES: So is the supply at risk? Well, seafood's vulnerable to an awful lot of contamination. You have a lot of fraud going on in the seafood industry. As you saw, there are a number of countries that are developing countries, their infrastructure is not as good as ours. And we

also have change in environmental threats.

Acidification is something that will be talked about, and that can create some problems. And I believe that is going to address some of these possibly a little later on as well.

As far as drugs being found in farmed fish, between 2004 and 2007 FDA tested for four different drug classes. Nine percent of the samples they looked at were positive, and these are some of the things that they found: Nitrofurans, malachite green, fluoroquinolones. We have rules against these. Some countries do not. Some things have never been tested for.

Interestingly, Australia which doesn't import anywhere near the volume that we do, in 2007 had 31 percent of the samples that they tested come out positive for a whole variety of things.

Yeah, Randy.

MR. CATES: Real quick. Is

Australia doing a more intense testing program
than the United States?

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1	MS. CHAVES: I believe so.
2	MR. HANSEN: Yeah.
3	MS. CHAVES: Yeah.
4	DR. DICKHOFF: They're looking for
5	88 different drugs.
6	MR. CATES: So it's safe to
7	assume
8	MS. CHAVES: That's partially why
9	also.
0	MR. MARTIN FISHER: Do they also
1	import more from China than we do?
2	MS. CHAVES: I doubt it.
3	MR. HANSEN: I seriously doubt
4	that.
5	MS. CHAVES: I serious doubt it.
6	And I should have also noted that some of the
7	imports from China that we have are products
8	that we have exported to China for processing,
9	such as salmon and white fish, we also send
0	crab over to be broken up, sometimes that's
1	being done at a U.S. plant where we have USDC
2	surveillance, but sometimes it just goes to

1	processing plant X down the corner and who
2	knows what's going on there.
3	MR. CATES: One quick question of
4	follow-up on that. Do you test domestic-
5	produced seafood?
6	MR. HANSEN: Do we, does NOAA
7	Fisheries? Yes, we have a testing protocol
8	for all inspected products and it varies by
9	what the risk is and what the product is and
0	so forth.
1	MR. CATES: Is that part of that R
2	number or would it be separate?
3	MR. HANSEN: No, it would be
4	separate.
5	MR. CATES: That would be
6	interesting to see.
7	MR. HANSEN: We have a database for
8	that.
9	DR. DICKHOFF: And those data for
0	the FDA studies, those are samples from China,
1	Indonesia, and Vietnam.
2	MS. CHAVES: Yeah. These are just

MR. CATES: To me it's important for the group because it would show I'm assuming it would show that the United States were producing safer product and it would drive, what my belief is, we need to find ways to produce more of our own because it's right there already.  MS. CHAVES: But when you take a look at the volume that we're importing, that's a huge challenge. I mean I agree with you a hundred percent.  MR. DEWEY: Linda?  MS. CHAVES: Yeah.  MR. DEWEY: I had a question back on your 40-percent inspected, is that 40 percent of imports or 40 percent of  MS. CHAVES: Of everything.  MR. DEWEY: Everything.  VICE CHAIR BALSIGER: But that inspection, the 40 percent, wouldn't look for	1	from Asia. So if you were to take a look at a
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1 VICE CHAIR BALSIGER: But that	9	MS. CHAVES: Of everything.
	0	MR. DEWEY: Everything.
inspection, the 40 percent, wouldn't look for	1	VICE CHAIR BALSIGER: But that
	2	inspection, the 40 percent, wouldn't look for

drugs in fish, would it?

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MR. HANSEN: Not mostly, but again we do take random samples and do analytical work in the National Seafood Inspection Lab for a broad array of seafood hazards. So depending on the risk of the product we would sample for that on kind of an intermittent basis, but we're building a database.

MS. CHAVES: I mean I think one of the things that's important, when you take a look at the increase in seafood imports and the increase in seafood that is available to the nation right now and the Inspection Program, which hasn't changed significantly in the last 20 years or so probably, we just don't have the capability to do what is necessary in today's world.

Economic fraud. Everybody's heard about -- okay, go ahead. Sorry.

MR. EBISUI: Sorry to digress. But you know in addition to seafood safety, with respect to the imports, is there any

asse	ssment	that's	done	to d	etermine	whether	r or
not	these	fish,	the	wild	l-caught	ones,	are
comi	ng from	n respor	nsible	e fish	heries?		
		MS. CH.	AVES:	The	governme	ent doe	sn't

do that. MSC identifies some fish that way, but we at this point are not doing that unless -- that's not totally true. We have some requirements for shrimp, we have some requirements for fish coming out of the Kamalar region, also for tuna, but it's not done across the board.

MR. EBISUI: It just seems somewhat hypocritical for the United States to being very careful about managing its fisheries responsibly and then, on the other hand, just importing from anywhere, from any fishery.

 $\label{eq:ms.chaves: And I'll address that} $$\operatorname{shortly.}$$ 

As far as fraud is concerned, this is only talking about species substitution. Everybody's read articles in the papers about farmed salmon being sold as king salmon in New

1	York and everybody loving the farmed salmon
2	but thinking they're eating king salmon.
3	Pangasius, frequently known as basa. I get
4	calls from the Border Protection Service
5	people saying: Does Thailand really produce
6	30,000 metric tons of grouper? And the
7	answer's no. So we get a lot of questions
8	like that. Snapper, rockfish.
9	And these are just some of the ones
0	that are with regard to species substitution.
1	You also get a lot of short weights, all the
2	typical things that you find in the industry.
3	Yes.
4	MR. FLETCHER: Some of these
5	species-substitution issues really aren't any
6	kind of a criminal violation.
7	MS. CHAVES: Correct well, yeah,
8	they are, but they're not a food safety
9	violation.
0	MR. FLETCHER: But I mean people
1	use common names that aren't accurate.

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MS. CHAVES: But you're supposed to

1	use names off the fish list.
2	MR. FLETCHER: It's in the also?
3	MS. CHAVES: Yes.
4	MR. HANSEN: A technical violation.
5	MR. FLETCHER: Well, I'll tell you
6	what, a lot of people don't know that and the
7	enforcement is almost nonexistent.
8	MS. CHAVES: Well, exactly, and the
9	FDA can't do it simply because they are
0	looking more at health concerns or
1	bioterrorism.
2	MR. CATES: It is against the law
3	and there was a guy who was arrested this
4	morning in Seattle for this exact
5	MS. CHAVES: That's right. Fined
6	about 140,000.
7	MR. CATES: He was arrested.
8	MS. CHAVES: Yeah.
9	MR. SIMPSON: If you go to Florida
0	and you order a grouper sandwich and you pay
1	\$6 for it, it ain't grouper.
2	(Laughter.)

MS. CHAVES: One of the other problems with some of the substitution is that you have allergy issues, where people can possibly get a fish that they're allergic to unknowingly. And so you do have a human health issue, but it's not a huge one.

MR. HANSEN: Or species-related food safety issues, that there would be masked because you don't know the real species.

MS. CHAVES: Consumer confidence.

MR. JONER: So when you go test whether it's real grouper or not, how do you do that? Does Tim taste them all and no other fish?

MR. HANSEN: Yes, I do.

MS. CHAVES: The National Safety Inspection Lab has some DNA testing and we have an ever-growing databank of DNA for different species. And I'm not sure if the Northwest Science Center does that. I know they have the capability to do it as well. We can do it, not as well as we might like to --

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or not to the extent that we would like to.

MR. JONER: Are there some triggers or indicators that this -- or is it just tests at random or somebody has a question? I mean that's kind of a dumb question. Do you use dogs to sniff and --

MR. HANSEN: And no beagles. I know usually if it's grouper you might suspect it at \$6. Like Larry points out, you might suspect that somebody's playing a game. And there are specific test kits developed for grouper now. I think the University of South Florida, Dr. Hogarth are working on that. And I think it's a big help for that fishery.

MS. CHAVES: And also the Customs and Border Protection people have laboratories where they're doing this and they're looking particularly at some of the species coming in from Asia because of the problems they're aware of.

MR. SIMPSON: Just another side, I mean I saw personally with my own eyes in

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Florida some of the restaurants are selling fish now instead of, because they've been criticized in the local papers and exposed.

They're not selling it as grouper. They're selling it as basa, on the menu.

Now my problem with that is they're still trying to charge grouper prices for basa, so I don't buy it.

MS. CHAVES: And if it works, I mean, whatever.

As far as consumer confidence is concerned, I mean this goes on the safety issues. It talks about contaminants. We've all heard about PCBs, we've heard about all of the antibiotics that are being used, not being used. And there's an awful lot of information about there about wild versus farmed.

Some of this information is accurate, some of it is not. Some of it is agenda driven, unfortunately. And it's something that just leaves the consumer confused and the consumer ends up going and

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eating something else. And so I believe that we have a responsibility to try to stand up for science and try to correct the inaccuracies that are out there.

International requirements for seafood imports. Countries all over the world are now requiring more certification of seafood. The European Union has for some time. China requires certificates, Russia requires certificates, Australia requires certificates. And that is just increasing.

And going to the bit about seafood

-- about fisheries management, the European

Union next January is implementing a new

regulation which will require that all seafood

imports have to be labeled as being IUU free.

We could talk for a week about that issue.

Their program is very, very different from the

U.S. program, where we're looking at notifying

countries, identifying countries as being bad.

One of the big strains on the Inspection Program will be that in the past

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FDA and we have been the organizations doing -- preparing the certificates for exports to the European Union. As of June we're going to 3 be the only ones doing it. And because FDA was doing it for free and we were charging something, you can probably figure out who was doing the bulk of the certifications beforehand. And so our inspectors are now going to be having to increase the volume of exports by about 900 percent.

MR. HANSEN: Well, let's see, yeah, not quite -- well, yeah, about 400 percent.

MS. CHAVES: Four hundred percent.

In any case, it's going to be a real challenge come January 1st. And come -- I mean June --

MR. HANSEN: June 17th.

MS. CHAVES: -- June 17th. And then come next January, they will also be doing certification on the IUU status of fish that we export to the European Union.

And I think --

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MR. HANSEN: I think it's my turn.

MS. CHAVES: Now it's your turn.

MR. HANSEN: Well, I thought I'd give a little context to you guys, I may have in the past, about sort of the regulatory situation in the country.

First of all, presently there's two competent authorities responsible for seafood safety and quality, and that's Food and Drug Administration, which is the lead agency. They are the regulatory folks that make sure that requirements are met.

Our mission is a little more limited. We're a voluntary fee-for-service organization that focuses on helping industry meet the needs of their customers in food quality and so forth.

In 1956, when we broke away from -or had legislation that broke us away from the
Department of Agriculture, we were given food
safety responsibilities under the Fish and
Wildlife Act. So right now we're the two

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players.

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We've got a third one coming, and this was one of the unknowables the last time we met, is the Food Safety Inspection Service of the USDA and the Ag Marketing Service in the Farm Bill 2008 were given authority to regulate catfish, farmed catfish, and if things go well possibly all farmed fish.

And it looks as though, just since I have people from the Food Safety Inspection Service calling me almost every day now, because they want to know things about catfish and farmed fish, it looks as though they're very serious about moving ahead and being the regulators in that area. So this is going to, I guess, make things a little murkier in the food regulatory world.

And I might note that the Farm Bill didn't take away any authority from the Food and Drug Administration, so now we have two major regulatory agencies with the same authority, which may have some interesting

results. What usually happens is I guess an agency, when there's overlapping authority, one of the agencies will take the case to the 3 Justice Department and the Solicitor General will make a decision. In fact, we've got a new attorney, and he found digging through the archives that in 1956 we actually -- USDA actually brought a case against the Interior 8 broken because we were away from the 10 Department of Agriculture, and Interior won. So there's precedence in the seafood world.

So this is going to kind of muddy the waters a little bit and it certainly will for us because now we'll have possibly two regulatory agencies that we have to coincide with.

Just a couple things on the -- you know, kind of the context, and I won't dwell on this because Linda has, is that you know the world's changed from the regulatory standpoint from particularly when Food and Drug organized. I think it was sort of

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designed for a domestic food industry, where the production plants would be available to them and they could do their inspection.

These days we think there's about shipping 20,000 plants overseas seafood products to the United States, which presents a very large challenge to FDA to try to figure out how to get out there and regulate these And, as Linda mentioned, people. some of these countries don't have great regulatory infrastructures. So Ι think they're struggling a little bit with that, could see it in the Food Protection Plan how to figure out how to adequately get to all these firms that ship us seafood products.

So I think in part the answer is we need to have better coordination between the agencies. And I think we can be a player and a helpful junior partner to FDA in some of these food safety issues overseas.

Just quickly, this is NOAA Fisheries' assets, if you will, for food

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safety regulatory situation. You have the Seafood Inspection Program, as I mentioned, is a voluntary fee-for-service organization under the Ag Marketing Act, which provides assistance in the inspection services to the industry to promote quality and safety of product.

We also have the National Seafood Inspection Laboratory which is in Pascagoula, Mississippi, which does a lot of our analytical work and is our baseline science support organization.

We also receive science support from Northwest Fisheries Science Center who does a whole array of research in the food safety providing environmental areas on research and monitoring and fish and shellfish and the effects of climate control and harmful algal blooms, and how all these things fit into human health and affect human health. And they also have had a good track record of responding to big emergencies like

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Valdez and the Cosco Busan and Katrina. And, as Walt mentioned, they do forensics, DNA testing for species I.D. for our Office of Law Enforcement and so forth.

Getting down to the nitty gritty here, we have a plan with four goals and probably about approximately 30 objectives under these goals.

The first goal is: NOAA's policies, priorities, and organization. Goal 2 is essentially how to strengthen the Seafood Inspection Program. The third is what sorts of research and monitoring, analytical sorts of things we ought to be doing, and the fourth is consideration about consumer protection, understanding, and confidence.

So just quickly, Goal 1, and the tagline we have for this: NOAA Fisheries Program -- remember we're looking into the year 2020 -- NOAA Fisheries Programs and research assure safe, consistent quality and accurately-labeled seafood for the nation. So

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the first objective we've got there is -
these are, by the way, overarching goals for

NOAA Fisheries in general -- we ought to be

part of and considered in the overall NOAA

strategic plan as a priority. And from

leadership last week I heard that that may be

already happening, that at least we'll be in

the mix.

The second objective is we recommend that maybe NOAA consider an external seafood advisory panel to help us set priorities on safety and research and health and dietary recommendations. It's always good to have an outside opinion on what you're doing in an organization like our Agency.

The third one is we recommend that the Seafood Inspection Program and NOAA Laboratories and Office of Law Enforcement continue to work to reduce economic fraud in the workplace. The Government Accountability Office just put out last month a study of seafood fraud in which they studied three

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agencies, FDA, NOAA, and Custom Border Protection, and were critical of all of us for 3 working together more closely not and recommended that we, first of all, have a -work together to build a forensics library so we can do broadbased DNA testing and also come together and come up with sort of a strategic plan or an agreement wherein we work more 8 closely together. And that process actually 10 started two weeks ago when we all met over at Sift Sand in College Park.

The fourth objective under Goal 1 is: NOAA increases our role in regulatory policy through greater participation in international FORA. This includes Codex Fish Committee, it may possibly other Codex Committees, the World Organization for Health, OIE, and ISO.

We're not the main regulatory body of the United States for fish, but we do have a great amount of expertise and capacity. And this is a place, in these international fora,

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NOAA Fishery provides

where we can make a big impact. And so we're recommending that we get a little support to do just that.

Number 5:

Seafood Inspection Program with the resources that better enable it to be the government source for all required seafood certificates. All of our certifications are on a fee-forservice basis, we were thinking more in terms of support money and services. And one of the things that thinking about we were was establishing a website that lays out all the export certification requirements that industry may encounter when they want to do business overseas. So it's kind of a one-stop shop. You can go there and find out what you If you can't figure it out, you need to know. can call us.

And also possibly thinking about other fishery data trade and possibly placed in other locations around the Earth. We have two: One in Belgium and one in Tokyo

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presently, and they do a terrific job of promoting trade and solving problems related to trade. And I'm wondering maybe a person in Beijing at some point might be given all the trade that goes into might be a key position to have to better promote trade.

That does it for Goal 1.

Goal 2, the line here is: its inspection certification increases and compliance verification capacity and effectiveness in response to consumer and industry needs, new mandates, and international trade requirements.

I think we have 14 objectives. I've sort of combined them here for brevity. But, first of all, most important is that we complete agreements with other agencies, and the most important one being their inspection agreement with the Food and Drug Administration.

I can tell you we're down to about 20 words, 20 phrases, just parts of words.

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We're very, very close. It now seems to be seafood inspection, NOAA Fisheries, is the answer that gets the GC lawyers in other higher levels of FDA. I think we're going to get there pretty soon. We're nibbling at the end and sort of mud wrestling about little bitty things right now.

Another one we've got going is with Service. Animal Plant Health Inspection There's been an increasing demand for animal health attestation for a live product or even a processed aquaculture product that's shipped overseas. They want to know this product is disease free. And that's the purview of APHIS, if you will. And, as it turns out, they don't want anything to do with it, so they gladly want to delegate it to NOAA Fisheries, and we're working on an MOU with them to do that. And that would be very germane with our deadline with the European Union, where the NOAA Fisheries Inspection Program will do all the certificates. Two

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weeks after that we have another deadline which imposes animal health attestations for products going into Europe. So we're going to need to have that delegation.

Possibly, I guess the Food Safety Inspection Service becomes the catfish kings, we will need to have some sort of an arrangement with them as well to work out our operational arrangements and so forth, how we -- you know, a framework of how we behave towards each other.

The second one is: Seafood inspection creates a joint program to address economic fraud in seafood in the marketplace with FDA, Custom Border Protection, and FSIS if necessary. As I mentioned, this is underway and I think we probably can attain this goal in the near future. So we're all working closer together to try to prevent some of these seafood fraud problems.

By the way, Linda mentioned species substitution, but the bigger problem is

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actually mislabeling and short weights, which from our inspection data looks to be about 30 percent of all lots that we look at. So it's a big problem and we hope to be able to address it with the other agency.

The third one: NOAA Fisheries increases Seafood Inspection's internal capacity to conduct foreign seafood HACCP ensure greater compliance audits to regulations. This one, we have about -- this has to do with training people to do HACCP And HACCP, as I think when I was inspections. at Food and Drug, we've learned that it's a pretty high maintenance operation, that people have to be highly trained and highly skilled to do these kinds of inspections. We just don't have enough people. We've got about 35 people right now that can do these sorts of We need at least double that, so things. help in we're seeking some getting that implemented into our program. And this is an auditory training, food safety -- recognizing

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food safety hazards and so forth.

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The next is kind of one combination of several objectives: Seafood Inspection rewrites and modernizes regulations for processed fishery products, which I have to tell you are hopelessly outdated. They probably should have been rewritten 20 years They're certainly outdated now. So ago. we're going to undertake that project as soon as we possibly can in the near future to try to modernize the regulations by which we do business.

Also the U.S. Grade Standards do not represent and most of them haven't been rewritten in 30 to 40 years. They don't represent the best practice in the industry anymore. Technology has kind of taken over. This wasn't so important a few years ago, but suddenly Walmart and Kroger and some of the big institutional buyers starting using these things as buying specifications, so then everybody got interested in them. So we want

to update those and make them very usable standards for the industry.

And, lastly, we'd like to create generic buying specifications for the retail trade. Retailers don't always know what they're doing when it comes to buying seafood. Like last year's guy we got from Walmart actually did tires the year before, so you can imagine he had a bit of a learning curve to figure out how in the heck to get the kind of fish quality that Walmart generally wants for their customers. So we face this sort of challenge all the time. If we had a generic buying specification we could just slip under their nose, I think that would help their learning curve.

Seafood -- we've mentioned this.

It becomes a government source for all seafood certification. That's actually about to happen, we think, June 17th.

And Seafood Inspection creates a database system to track inspection

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information, issue certificates and billings. Right now we have no such system. We have an 3 antiquated billing system and we generally write certificates on PDF forms. We have a \$23 million budget. It's very difficult to 5 run such an organization when you don't have a management information system. And begun the process of developing this, but I think this is a goal that will very much make 10 better managers if we can understand looking into problems and trends by the database.

Seafood inspection develops training programs for both inspectors and We have fairly extensive training industry. in HACCP, sanitation, and of course for seafood chefs, for the industry, and also our inspectors take the same course for HACCP. But having spent almost nine years away at FDA, when I came back I found that we don't really anymore have a standard training program. So that's -- given that we really

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need to develop the professionalism of our workforce, this is a very important goal for us, is to try to figure out how we can make sure that these people are learning new and better things all the time.

The last one is, like I said, about to happen: Seafood Inspection becomes the export certificates for sole source seafood, including EU Health and Catch Certificates. And the Health Certificates will refer to us on June 17th, we think. Catch Certificates, if the the Commission stays to their deadline will be And that one will be sort of a January 1. traceability system to figure out if a wild product is caught legally, in a legal fishery. And we think that NOAA Fishery is the bestmanaged fisheries program in the world and we think we can show that. But we're working on negotiations with the European Commission at this time.

And with that, Goal 3, I'm going to

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give this little thing over to Dr. Dickhoff.

DR. DICKHOFF: Goal 3 addresses research and monitoring capabilities. As you heard from Tim and Linda, our seafood supply is changing rapidly; wild-capture fisheries, aquaculture, from 150 different countries. To give you an idea of the diversity of aquaculture species, there's approximately 400 different aquatic species undergoing domestication.

So to anticipate and be proactive in addressing the changing threats and risks for seafood imports, we need to increase the analytical capacities and capabilities for identification of trends and contaminants, nutrients, and seafood safety.

Contaminants, as you've seen earlier, are some of the veterinarian drugs that we find in imported seafood from Asia.

Nutrients will probably change too. For example, omega-3s fluctuate quite a bit.

They're very high in cultured salmonids,

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higher than in wild salmonids, the omega-3 fatty acids. But as industries change to different feeds, more plant-based feeds and oils and proteins, the omega-3 patterns may change there too. So we need to track nutrients.

NOAA Fisheries needs to conduct a sustained monitoring effort that systematically samples the seafood supply.

NOAA Fisheries develops and validates -- this is number 3 -- accurate and rapid methods for identification of seafood species. The consortium on the barcode of life is trying to establish a DNA sequence, a DNA barcode that would identify all animal species and plants. And that's a part of a cytochrome c-oxidase gene, which is being used for a lot of fish species, and it seems to work quite well. So this DNA barcode would be used as a basis for species identification.

The FDA is leading the coordination among federal labs, and NOAA Fisheries' labs

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are involved in establishing and validating these DNA barcoding techniques for identification. These are backed 3 up by vouchered museum specimens of fish either in the Smithsonian or University of Washington 5 Fish Collections. So that's going -- seafood species I.D. methods are ongoing and it's hoped by 2020 there will be a handheld DNA species device that industry could use to 10 identify species. And that's been supported by NOAA Fisheries through the Small Business and Innovative Research Program.

NOAA Fisheries determines the role of climate change and incidents of algal toxins and bacterial pathogens in seafood. We're seeing changes in the incidence of biotoxins. For example, some of the harmful algal blooms producing domoic acid paralytic shellfish poisoning that have been increasing in some places. Bacterial pathogens in seafood also are changing recently, and I'll show some data.

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Here, these are data showing the relative incidence of certain seafood pathogen infections for the last ten years. And this includes -- these are data from the Center for Control and Prevention, Disease а Recent Update. And it shows a number of lines there on the decline over the last ten years, including things like Salmonella Campylobacter, Listeria, and some strains of e-coli are on the decline. But vibrios are clearly increasing. Vibrio parahaemolyticus and vibrio vulnificus, which are common which are usually seen in shellfish pathogens but can also be found in fin fish.

And these vibrios, for example vibrio parahaemolytics was seen in 2003 for the first time in Alaska, so these are increasing and probably are linked to or speculated that they're linked to increases in temperatures and maybe also changes in ocean pH, ocean acidity.

One last research thing. So we're

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also trying to develop early-warning systems to support managers and decision-makers with tools to protect human health and seafood safety. These early-warning systems may be looking at climate or environmental parameters and trying to predict when outbreaks are most likely to occur.

For example, in the Puget Sound area researchers have identified that when you get a combination of low tidal exchange, low rains and runoffs, and low winds, you have a higher incidence of harmful algal blooms. So that could affect shellfish harvest. So those are major research issues.

And also important with this, especially in seafood safety, is consumer perception, understanding, and confidence. As before, there mentioned is lot of а misinformation. But we need to establish a public information education and program regarding the health benefits and risks of seafood. And the accumulating evidence is

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that the benefits far outweigh the risks.

One of the omega-3 fatty acids, DHA, docosahexaenoic, is critical in child and fetal development. And its main dietary source is in seafood, so that needs to be communicated.

establishes a international NOAA clearing for seafood house and health in information conjunction with other international agencies, because there other countries and international efforts in these same -- along these same lines.

NOAA supports research and development of analytical capacity to identify nutritionally beneficial components of seafood and develop databases on micro-constituents. This is again important as the nature of our seafood supply changes and as fish feeds and aquaculture change.

NOAA Fisheries develops tools for consumers that help them make informed decisions. These could include things like an

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algorithm, where you go online and you add in what sort of species of fish you eat that could tell you how much mercury risk do you have, how many omega-3s are you bringing in.

NOAA Fisheries develops tools for the seafood trade to enable accurate identification in seafood species.

And then, finally: NOAA supports the American Heart Association and other health organizations' recommendations that per capita seafood consumption be increased to at least two meals per week or 12 ounces.

So, as we've shown, the nature of seafood supply is rapidly changing. It's rather dynamic. This is changing the risks and concerns for seafood safety, and we need to be responsive to these. And hopefully this plan should enable the Agency to align seafood quality and safety with its mission, better serve the seafood consumer, and be an effective federal partner.

Thanks.

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MR. BILLY: Tim, so your plan is to complete a written strategic plan that is painted by these slides and make it available in a month's time; is that my understanding?

MR. HANSEN: Yes, sir.

MR. BILLY: Okay. Thanks.

Yeah, Heather.

MS. McCARTY: Thank you. My question is obvious, I think. Are you going to have also as part of that the potential costs -- yeah, it looks like a pretty massive undertaking and I think it's great, but I just want to know what kind of resources might need to be put towards it.

MS. CHAVES: We have started gathering some of that information. We're also trying to identify what is already being covered. I mean we're not talking about new money for everything because some of these things are ongoing. Some will need to be supplemented. And we're also looking at doing this over a several-year timeframe.

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So I mean one of the things will be an implementation plan which has lots of lines and x's and things like that, but this is nowhere near ready for prime time. And we'll be doing one of those with dollar amounts on it, too.

MR. HANSEN: Yeah. If I could just follow up. A lot of this will probably just come from fees assessed to the industry. It just will take us some time to accomplish these things. It's time more than money.

MR. BILLY: Vince.

MR. O'SHEA: Thanks, Mr. Chairman.

Tim, I've gotten a call from at least one industry on EU Health and Catch Certificate issue coming up. And I also heard a presentation on a fellow in Seattle that's working on trace register of product, a computer product. And my question is: Are you plugged into that group at all and are you doing anything with other groups that might show promise in being able to comply with

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these EU requirements?

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MR. HANSEN: Well, I think, yeah, all of us have talked to these guys quite a bit and they've shown us their products which are, quite frankly, impressive. There are others. I didn't think they did, but they do have several competitors who I met over in Belgium a couple of weeks ago. And that would be a rather elegant solution to some of this traceability stuff, assuming we have to actually attest to all that stuff.

However, I think we're meeting a little resistance from the EC on that EGRMA, their fisheries people who seem to want this to be a governmental sort of activity. However, we're negotiating and we really haven't settled on an end point on that yet, but that would be something that certainly would do the job I would think.

MR. O'SHEA: Just a quick followup. That's interesting because UL isn't a government thing and --

1	MR. HANSEN: Right.
2	MR. O'SHEA: you plug in your
3	alarm clock, it's safe.
4	MR. HANSEN: They do a good job.
5	Right.
6	MR. O'SHEA: Thanks.
7	MR. BILLY: Dorothy.
8	MS. LOWMAN: It's the same
9	questions as Heather, but just a follow-up.
0	You're looking like you're taking over the EU
1	certifications starting in June, which is
2	coming right up.
3	MR. HANSEN: Right.
4	MS. LOWMAN: And I think it will be
5	fee based, right, but are you at all concerned
6	that you have the capacity within to do this
7	in a timely manner?
8	MR. HANSEN: I'm not too concerned.
9	We actually have a little
0	MR. BILLY: I can't hear your
1	response, Tim.
2	MR. HANSEN: excess capacity in

New England, where we're going to be. MR. BILLY: Tim, you need to speak 3 louder. Some of us are having a hard time. MR. HANSEN: Me or her? MR. BILLY: You. MR. HANSEN: I'm sorry. (Laughter.) HANSEN: Well, it turns out, MR. her question was whether we have the capacity 10 to do all that EU work. And I just point out that FDA in the New England area is doing it with two people, and we just so happen to have 13 -- to be over capacity by two full-time equivalents, so we're not concerned about it. We have plenty of part-time people that 16 always want more work. And have we supervisory staff that can chip in if they need to. So I think we're going to have it 18 covered. MR. BILLY: Linda. MS. CHAVES: Well, one more thing We're also going to become more to add.

electronic, so that's going to reduce some of the learn time.

MR. HANSEN: Yeah.

MR. BILLY: And Dave Wallace.

MR. WALLACE: My question goes really back to what Larry had to say, but it also connects into the two questions on costs that have just recently been addressed.

And mine is I didn't see a policy statement in your proposed strategic plan which says that imports of product into the United States should have to meet some of the requirements that, for example, we have to meet for the EU, and it becomes the importing country's responsibility to develop approved plan like HACCP for identifying the fish; weights; the chemicals the used, especially in aquaculture. You know we end up being the country that's responsible protecting our health and we should really, in my opinion, have a policy that says that Congress, the FDA, NMFS, maybe EPA should all

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put forth a collective policy for seafood safety imports that meet the requirements of our producers, because we -- yes, they have to 3 meet the HACCP plans, but they are required to identify how they're protecting our customers' health, which gives them the advantage of producing it less expensively than us. And we should make it not free trade but -- not fair trade -- free trade but fair 10 trade, where the U.S. producer is not required 11 to do any more than anyone else, but we also protect the rest of our customers.

MR. HANSEN: Yeah. Well, first of all, FDA does have, as you mentioned, does require the products that they inspect meet U.S. standard. The trouble is that they don't have the capacity or the personnel to really look at a lot of products, so it's a monitoring system at best.

What you're really talking about is sort of following the European Union model, if you will. And I guess to make that work we,

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the United States, would have to require some system of certification. In talking to my FDA colleagues, I think they have come a long way think they're this one. Ι actually considering something like that and considering developing a list of approved plants and that sort of thing. It's sort of along the EU model.

Obviously things need to change and we don't know exactly what legislation is going to bring us, but maybe the Europeans don't have such a bad system after all. Maybe their consumer protections turn out to be pretty impressive. But that's in my opinion what we'd have to do -- first of all coordinate our activities and, secondly, have measures in place like Europe does.

MR. BILLY: I'm going to be very interested to see how the Food Safety and Inspection Service and USDA deals with catfish and related species, because for meat and poultry they have under the law a set of

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requirements the force the foreign countries to have the same system as the U.S. for an equivalent system. And it is thoroughly vetted and enforced for all meat and poultry products.

Now that catfish has been added an amenable species under the Meat Act, I'm sure FSIS is going to use the same approach for catfish. We may have a living example of how that kind of approach can work for catfish from Vietnam and China and wherever else they come from, because, as I say, they don't mess around. It's for real, it is strictly enforced, and it may set a precedent for seafood.

Martin.

MR. MARTIN FISHER: Thank you, Mr. Chairman.

Tim, I thought I heard you say earlier that you were looking to have some certificate of inspection standardized among agencies. Did I hear you right?

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1	MR. HANSEN: No. Actually we'd
2	issue all the certificates, whatever they'd
3	be, for seafood.
4	MR. MARTIN FISHER: Wasn't there
5	some issue, there was some certificate you
6	wanted to like standardize throughout the
7	MR. HANSEN: No. Essentially,
8	certificates are demanded by the country we
9	export to, generally. So whatever format and
0	information they want, we follow that format
1	and provide the information and the
2	attestation and so forth.
3	MR. MARTIN FISHER: And is there
4	anything that MAFAC can do for you? I mean
5	are there any things that you need that we
6	could recommend to the Secretary that would
7	facilitate your request?
8	MR. HANSEN: Request for
9	inspections or are you talking about
0	MR. MARTIN FISHER: Whatever.
1	MR. HANSEN: Well,
2	MR. MARTIN FISHER: Is there

anything you need that you don't have?

MR. HANSEN: Take onboard what you think makes sense for this Committee, once you've thought about it. This is what we're thinking about. And if you want to make comments or support any of these objectives, then that would be a big help I would think.

MR. BILLY: Randy.

MR. CATES: Linda, I have question. Every year NOAA puts out in its various speeches what the percentage imports is versus seafood consumed. Last year Admiral Lautenbacher quoted an 82-percent import and every year it keeps going up. Do you know what the current percentage is?

MS. CHAVES: It's right around there. I haven't seen the most recent numbers from the NT Office. Depends on the calculation.

VICE CHAIR BALSIGER: I do know that the head of Fisheries on Monday on the State of the Ocean -- or last Thursday -- when

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1	was it the State of the Ocean said it was
2	84 percent, and so I presume that must be the
3	latest data we have.
4	MR. CATES: And then the next
5	question I guess I would put to the MAFAC
6	Board is, every meeting it's very clear the
7	direction we're going in, that demand is going
8	up, our production is flat-lined. What I put
9	back to ourselves is: What are we going to do
0	to increase production? We have never in my
1	recollection talked about increasing
2	production. We're always talking about
3	quotas, various fisheries of maintaining a
4	status quo, other than aquaculture which has
5	sort of become a dead issue.
6	MS. CHAVES: I'd like to add to
7	that and that is
8	THE REPORTER: Ms. Chaves, I'm
9	sorry.
0	MS. CHAVES: That's all right.
1	Sure.
2	THE REPORTER: Can you come up here

closer to the mic?

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CHAVES: I think that we're MS. going it's going become to to see increasingly difficult for the United States to access the fish supplies globally that we want. We used to be a larger importer of seafood than the European Union. They have now gone ahead of us. They are the largest seafood importer in the world. They import an awful lot to supply their processing industry.

The Chinese are importing more and while they're exporting an awful lot, they're keeping a lot more of that within China to meet their food demand. And so I think that the overall pie, even though it's growing, is going to become a little more difficult for us to access, which sort of feeds into your...

MR. CATES: Well, we as a body need to start thinking about now how we're going to increase production. We never really talk about that. Whether it's from the wild fishery or aquaculture, what are we going to

do and what are we going to recommend to increase that supply and production?

MR. BILLY: Randy, our 2020 report recall, reference the does, as I arowina demand and the challenges to meet that demand both domestically and internationally. But maybe, picking up on your point, some further thought by this Committee of how that's going to be achieved and what that looks like or should look like in the future, would be a worthwhile endeavor. Just a thought when you think about that.

Other questions or comments?
Okay. Yeah, Dave.

MR. WALLACE: I guess I'll jump in.

It is absolutely necessary for NOAA to not get bogged down in offshore aquaculture. And everything I read, it just looks like it's going to become more and more of a quagmire.

And we do have to address the issues of drugs or pharmaceuticals in the fish feed and whathave-you and escapement and those things.

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But it is absolutely essential that something besides a third-world become country as far as aquaculture, because we are a third-world country, and it just irritates me to no end to think of that, that Chinese make us look just silly as far as open ocean aquaculture. And we, from my perspective, this Committee needs to say to Congress and to the administration that need to get serious and not dillydally around for the next 25 years talking about silly things that then forbids us from becoming -using the technology expertise that we have to move the world forward and not just be some follower.

And I think that if I have anything to do with this Committee, one of the strong recommendations that is going to come out of this Committee is that we have to move forward, we have to take science seriously, but we just don't need to get bogged down in petty zoning of the sea.

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MR. BILLY: Tim.

MR. HANSEN: Yeah. Thank you, Mr. Chairman. I guess now that we've presented the basic basis of our strategic plan, we'd be really interested at some point if we could get some feedback from you folks. You had a lot of excellent questions. But what do you think about this and what works and what doesn't? I personally would really like to hear from you guys about that.

VICE CHAIR BALSIGER: Well, Tim, what's your plan for -- within a month you're going to produce a strategic plan. Is that going to be out for public comment or you want input, but do you want it before you put out your draft or are you talking about when you type this thing up?

MR. HANSEN: No. I think we finished the draft. And then we'd like input whenever we can get it, essentially.

MR. BILLY: Randy.

MR. RANDY FISHER: The devil's in

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1	the details. I want to know how much money
2	it's going to cost.
3	MR. HANSEN: Mark, do they have
4	access to the current draft; is that
5	DR. HOLLIDAY: No, I did not share
6	that draft with them because it wasn't ready
7	to be distributed.
8	MR. HANSEN: Our next step is to
9	get it out to you guys, but any thoughts you
0	have would be greatly appreciated.
1	MR. BILLY: So in about a month's
2	time you will complete a draft with all this
3	budget and other information?
4	MR. HANSEN: Yes.
5	MR. BILLY: We can make it
6	available?
7	MR. HANSEN: No. In a month's
8	time, yeah.
9	MR. BILLY: Yeah, in a month's
0	time. And then have a strategy within the
1	Committee to respond back, if you can figure
2	out how we want to do that.

DR. HOLLIDAY: But this afternoon if you have any discussion points on his presentation, on these general principles, you could take that up as a Subcommittee this afternoon. MR. BILLY: Okay. DR. HOLLIDAY: The details are not available. MR. BILLY: Okay. Any other comments? I'm sorry. Yeah. MS. FELLER: I just wanted clarification. In terms of the consumer education aspects of the strategic plan, what's kind of the action you want the 16 consumer to take? I mean do you want to direct them to a website, do you want them to buy something? That part I didn't quite understand. MR. HANSEN: Well, I think we want them to -- we want to provide them with access

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to information and education on this subject.

Whether they'll take us up on it of course is another matter.

MS. FELLER: Well, that's actually a really good point and that's what raises the is there's awful lot question, an of information available to the consumers. And you're never quite sure what people are tuning into and what they're getting. And wondering if it came up in your discussions, how you sort of cut through the clutter and give people -- my experience with sort of public messaging is you ought to give people one sort of simple thing, you know, something like: Just say no.

What kind of action do you want them to take and respond to? Just food for thought.

MR. HANSEN: Okay.

DR. DICKHOFF: Part of developing the outreach and the communication is developing the best way to communicate that information clear and simple. Because, yeah,

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you're correct. The public is very confused and they get mixed messages. They see risk versus benefit and risk gets magnified.

So in Seafood Choices, the National Academy's Chapter 6, there's a very good description of what the issues are and how better to communicate things, so that's something that we propose to do is look at developing that technology for simplification.

MS. FELLER: And, by the way, I wasn't suggesting "Just say no" is the message to get across.

(Laughter.)

MR. BILLY: Ed.

MR. EBISUI: Yeah. Thank you. I'd like to follow up on what Erika just said. I think if it's a matter of postings on websites and encouraging people to go to a website, I think that the people who are going to go and take advantage of it are already well informed. I think it's the other sector that needs to be reached. And I would hope that

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the government, which presumably is the authoritative voice, like for example the FDA, would take a position and get it out to the 3 masses, not to those that are already interested in it. Because there's so much 5 misinformation going on out there, and I think other groups are much more effective publishing their message. But I think the 8 government needs to take a stand to publicize 10 it.

MR. BILLY: Is it on this point, Linda?

MS. CHAVES: Yeah. One of the things do is work with you want to organizations that are thought leaders, that are telling other people what to do, to make sure that they have accurate, science-based information so that they can make their decisions, because people go to the American Heart Association, they go to the American Dietetic Association, and a lot of people say: We see all of this stuff, but we

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don't have a clue as to what believe. And we've already made some approaches to some of those folks who are interested and they're really looking for information. They're hungry for it.

MR. BILLY: Larry, you have the last word.

MR. SIMPSON: Ending up on a note of optimism. The eight councils, I assume the eight, I know at least our region and some of the others are working on a group and they're very energetic and charged. And it's getting the information out on not so much about fish but why we do what we do and how we do what we do.

So this group, which is a council offshoot, may provide some kind of vehicle for the public, who's pretty much interested in how bad and terrible we do managing fish, at least being a conduit for this kind of information. It's already caused us at the Commission to develop a subcommittee so the

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1	states can kind of get in on the act, and
2	they're enthused right now and they're
3	energized about this. And I think at the CCC
4	meeting next week they're going to talk about
5	it. So there's another conduit and let's use
6	it.
7	MR. BILLY: Okay. All right, let's
8	break for lunch. We're down for an hour, so
9	about ten after 1:00. See you all then.
0	(Luncheon recess taken from 12:08
1	p.m. to 1:17 p.m.)
2	MR. BILLY: Okay, thanks for coming
3	back in time.
4	Next we're going to have a couple
5	of presentations by people located in this
6	immediate area. Bill Douros and Paul Michel
7	
8	MR. MICHEL: Michel.
9	MR. BILLY: of the Monterey Bay
0	National Marine Sanctuary Program.
1	MR. DOUROS: I'll kick it off. Hi.
2	My name is Bill Douros and I'm the West Coast

Regional Director for the National Marine
Sanctuary Program. My office is here in
Monterey. In fact, it's about 200 yards away.

So I appreciate not only that you're in
Monterey, but you chose a venue so close I
didn't have to worry about parking, I just had
to worry about being late. You know the
closer you are the more often you're the last
one there.

And I'm going to talk for just a couple minutes and then introduce Paul Michel, and he's really sort of the heart of presentation on what's going on here locally.

We were asked to give you a sense of what's going on in the Sanctuary Program here locally. And I don't know for sure how familiar all of you were with the National Marine Sanctuary Program. I thought I'd give you a couple of minutes on that. For some I know it's going to be redundant. But our program, we're managed by NOAA. We're in the National Ocean Service. The National Ocean

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Service protects coasts and oceans; Coastal Zone Management Program, for instance, is in that. And I believe you're hearing tomorrow from Charlie Wahle from the MPA Center; that's also in the National Ocean Service.

Sanctuary Program The has been around since 1972, when President Nixon, in fact, signed the legislation creating the National Marine Sanctuaries Program. And over the last 35 or so years there have been 13 Marine Sanctuaries designated, shown here by and then regions around the country, Paphanaumokuakea Marine National Monument, the Northwestern Hawaiian Islands was directed by Clinton. We work through that and we're about to declare it a sanctuary and President Bush declared it a Marine National Monument.

And then as part of the recent action that President Bush took before leaving office, there are three large areas designated in the Pacific, one of those, Rose Atoll, was something that he directed be added to the

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National Marine Sanctuary system as part of the Fagatele Bay Sanctuary.

So this map doesn't show it, but there's also a very large area that will be added, and we've initiated that process as well.

But these sanctuaries, by and large, on the East Coast they're smaller, they're offshore predominantly, beyond the three-mile line except for the Florida Keys Sanctuary. On the West Coast they tend to be larger. Four of the five on the West Coast that I'm responsible for come to shore and go out ten miles, 30 miles, 50 miles in some cases.

The biggest Marine Sanctuary is the Monterey Bay Sanctuary. It's almost 6100 square miles. The Papahanaumokuakea Marine National Monument, to give you a sense of scale, everyone thought the Monterey Bay Sanctuary was gigantic, it's almost 150,000 square miles. So 6,000 was big until the

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Monument came along, and then it sort of dwarfed everything.

By and large, we protect things from what we consider an ecosystem-based management perspective. That's the way it's been since the Sanctuaries Act was authorized in 1972. We have these requirements to raise public awareness and understanding through education and outreach about ocean issues, predominantly those going on in or near the improving Sanctuary; management through research; historical and conservation science; monitoring; as well, both research that we do and that which we coordinate with others, including folks like at the Fishery Service; helping coastal economies by promoting and protecting healthy resources, and helping to show why those matter to coastal communities; and facilitating public use compatible with resource protection. And that's why to us the notion that fishing taking place in sanctuary to us makes perfect sense. Healthy

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fisheries, sustainable fisheries in a sanctuary demonstrate a healthy ecosystem.

There are a few sanctuaries, about half of them have regulations that restrict some aspect of fishing, but the other half have no restrictions on fishing. And those that do are predominantly limiting one particular gear type known to cause habitat damage. For instance, a shipwreck site will limit gear that hits the benthic habitat.

There are some marine reserves, marine protecting areas in the Channel Island Sanctuary and in the Florida Keys Sanctuary. And we've worked with the Fisheries Service on other protections: Benthic habitat and others. And Paul's going to talk about those here on the West Coast.

And so the next slide just gives you a little bit more of a sense, we'll start from large, national to the regional, the areas that we have here on the West Coast include the Olympic Coast Sanctuary, which is

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up off the Olympic Peninsula. On the right there gives you, if you care, a little bit of the budget information and how big they are and how many staff we have. Typically five to fifteen staff at these sanctuaries.

The Cordell Bank Sanctuary is about 500 square miles. That's the one that is entirely offshore and it protects the Cordell Bank itself, which is just north of San Francisco.

The Gulf of the Farallones Sanctuary has a staff of about 15. It was designated in 1981 and that's about 1200 square miles.

The Monterey Bay Sanctuary -- and these three are contiguous here in Central California -- was recently expanded with the inclusion of the Davidson Sea Mount. This remarkable ancient volcano that's about 60 miles offshore, the top of which is in 4,000 feet of water, is another good example of working with the Fishery Management Council

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and NOAA Fisheries to protect the benthic environment through regulations that they have passed, from fishing. We protect it from other activities.

And then the Channel Island Sanctuary surrounding the Channel Islands is the oldest one on the West Coast, the second-oldest one designated in the system.

So that just gives you a layout of what we've got going here on the West Coast in terms of what those sanctuaries are. working on a diverse array of issues global climate change to coastal development, sea walls, and desalination plants and many challenges that affect other the environment and how we work with partners, state agencies in particular, and federal agencies, is a key part to the kind of work that we do.

We're not a regulatory agency, per se. We consider ourselves much more of a resource-management agency. Few regulations.

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Far more goes into non-regulatory solutions.

Paul Michel's going to talk So 3 specifically about the Monterey Bay Sanctuary. Ι had been the pleasure of being the Superintendent here at the Monterey 5 Bay Sanctuary for eight years, before three years ago becoming the Regional Director, certainly know the challenges that Paul faces. And he's come to us, he's got a long career 10 in the EPA, and is doing a fantastic job at getting this Sanctuary even further down the road than I was able to get it. So he wants **1**3 to talk about some specific things about the 14 Monterey Bay Sanctuary and how some of that might intersect with fishing issues.

MR. MICHEL: Well, thanks, Bill.

Once again, you're a hard act to follow.

Eight years in the chair and presentations as well. So thank you. It's my pleasure to present to you and to talk about what's going on with the Monterey Bay Marine Sanctuary.

Well, the mission of the Monterey

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Bay Sanctuary, like others, is to understand and protect the coastal ecosystem and cultural resources of Central California. And we do that primarily through four program areas:
Resource protection, which as you can guess is probably most concerned with regulations and permitting, water quality protection, enforcement, emergency response.

Research and monitoring, which here is primarily involving coordinating among a dozen or more research, science institutions that do work all on the central coast. And then education, outreach, a major component of what we do is reaching all ages and segments of the population and stakeholders along the central coast to inform and inspire about ocean literacy and ocean stewardship.

And then program support involves primarily our operation, so we have a research vessel, the *Fulmar*, which hopefully you'll be able to see. It's down at the Coast Guard Pier, a 67-foot research vessel. And we have

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a small patrol boat.

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And then we also have what's called a Sanctuary Advisory Council, like all other sanctuaries. And that council is made up of, just like this group, a diversity of interests representing all the stakeholders along the central coast; that body meets about six times per year, and so we facilitate that.

So of course this area along the central coast is world famous for its natural beauty and its seascapes and the abundance of diversity and diversity of sea life here.

Over 345 species of fish, four species of turtles, 94 different species of sea birds, 33 different species of marine mammals you can find in this sanctuary -- which is pretty phenomenal -- and more invertebrates and green algae than I can shake a stick at.

So, as Bill said, we've got these three contiguous sanctuaries: Cordell, Gulf of Farallones, and Monterey Bay. And we just went through a joint management review and

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revision, so we have new management plans and new regulations for these three central coast sanctuaries. So that's a pretty significant chunk of the California coast.

And within just Monterey Bay Sanctuary we have in our new management plan we have 26 different action plans that cover a variety of really important issues coastal armoring to desalination to submerged cables, benthic habitats, MPAs, literacy, water quality again, marine mammal protection. I highlighted a few of these that I thought you might be most interested in: Benthic habitats in marine protected areas and fishing education and research.

In the area of benthic habitats, that's primarily focused on the characterizing the sea floor, looking at the effects of bottom trolling on benthic habitats, as well as doing some lost and abandoned fishing gear removal where that's feasible.

I'll talk a bit more about MPAs in

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a minute.

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Fishing education and research. One of the things that we're doing there is implementing this printing called Fishermen in It's targeting area high the Classroom. schools where we bring fishermen in the classroom to talk about what it's like to be a fishermen, what's the fishing industry do, and whatnot. So it's pretty exciting.

Turning to Marine Protected Areas.

There's no more controversial and difficult subject you can take on as Marine Protected Areas. And I'm looking at Marine Protected Areas in the broadest sense of the term. Any special place that's designated to protect habitat or water quality or a specific target species. And looking at that in that broad definition, we did a recent survey and found that there are nearly 300 different Marine Protected Areas, given that broad definition, along the West Coast. But what's interesting to note is that they really span a diversity

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of federal, state, and local regimes and management measures, and they span state and federal waters.

So at first glance it looks like, wow, the West Coast is pretty locked up in Marine Protected Areas. But you got to dig a little bit deeper to see what's going on.

So who manages these West Coast Well, you can see that what's sanctuaries? interesting here is that about twice as many MPAs are managed by state -- or there's twice as many state MPAs as there are federal, but in terms of area federal MPAs cover the vast majority of area. And that's because the federal MPAs include things like fishery management measures, like essential fish habitat, rockfish conservation areas, and our National Marine Sanctuary. So you can see the majority is really in federal management.

So when you look at this the overwhelming majority of MPA area covers multiple use. And so when we ask ourselves,

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well, what are all of these Marine Protected
Areas doing for really focused ecosystem-based
management. Well, if you've got 99, almost a
hundred percent are multiple use, and about
less than half of a percent are no-take marine
reserves, which often gets confused with
Marine Protected Areas, you begin to see that
there's quite a disparity there.

Federal MPAs are typically large and multiple use, whereas state MPAs are typically small. And there are no-take MPAs that are primarily managed by states. The largest MPAs are federally managed, like I said.

This morning I saw on the news some recent data coming out of the National Center for Environmental Ecological Assessment and Synthesis at U.C. Santa Barbara. And they produced this map of the West Coast that's trying to get a handle on the impact, human impacts to the environment, to the West Coast.

And what this article said was that

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1	climate change, fishing, pollution, and
2	commercial shipping topped the list of threats
3	to the ocean off the West Coast. Every single
4	spot of the ocean along the West Coast is
5	affected by 10 to 15 different human
6	activities annually. So we know this, you all
7	know this.
8	Hot spots have a cumulative impact
9	
0	MR. FLETCHER: Excuse me.
1	MR. MICHEL: Yeah.
2	MR. FLETCHER: I'm kind of curious.
3	How is fishing characterized as a threat to
4	the ocean?
5	MR. MICHEL: It's probably in terms
6	of the biomass that's taken or the impact to
7	habitat. I'd have to dig down into the report
8	to tell you.
9	MR. FLETCHER: Okay.
0	MR. MICHEL: I just want to give a
1	snapshot of this, not just about what we
2	typically think of as fishing but it's all

these other impacts that are happening, like water pollution, that when you start talking about ecosystem-based management, you have to take into consideration.

What I thought was interesting was we tend to think that hot spots of cumulative impact are near urban centers and heavily polluted watershed, but what this map is showing and what this report talks about is that these impacts are not limited to just the near-shore waters.

So as marine resource managers we comprehensive have to now use more and holistic approaches, such as ecosystem-based management, Marine Protected Areas, as well as integrate and coordinate among numerous laws and programs, like Magnuson-Stevens and the the Sanctuaries Act and Marine Protection Act.

So we're already attempting to do ecosystem-based management in the Sanctuary using various tools. We have voluntary water-

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quality protection, research and monitoring, and strong partnerships with our stakeholders.

Recently we announced an effort to renew our MPA planning, to look at what additional protections might be warranted in the federal waters of the Sanctuary, realizing that a state process has just recently gone through and designated state marine protected areas in state waters. So we have identified three ecosystem needs for the federal waters in the Sanctuary.

The first one is to protect rare and unique places. Secondly, to maintain and/or restore ecosystem components. That is, community composition, community structure, extended age structure of populations. And, third, to establish research areas to distinguish between natural variation and human impacts.

We've been discussing this with our agency partnerships, the National Marine Fisheries Service and the Pacific Fishery

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Management Council, and within the National Marine Sanctuaries Program, to try to lay out a roadmap that makes sense for how we're going to do this analysis of what's currently in place in our sanctuary, what additional measures might be needed.

And so we know, first off, if this roadmap is going to include things like interagency collaboration, early and frequent communications. And we're trying to identify what complimentary needs and objectives there are, such as essential fish habitat, might be a way to look at how we can incorporate our Marine Protected Areas' needs and to, for example, we know that we're going to have to do robust socio and economic studies, to get a handle on the real costs and benefits of doing MPA planning. And of course best available science.

And what's big at sanctuaries is stakeholder participation. So part of this is teeing up a stakeholder process through our

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Advisory Council and the establishment of an MPA working group and science panel to help quide this process.

And we really need to use NEPA as the driver for this, to make sure we do a really good job on alternative identification and analysis and public participation throughout.

So that's kind of where we are. wanted to give you a snapshot of one of the issues that you might be primarily interested And we realize this is going to in. difficult. It's going to be controversial and complicated, but I think we also have to take into consideration the differences of management goals and objectives that reside within NOAA and that we need to try integrate those to do the best job we can for the marine environment, especially sanctuaries. If we can't do it in special places I'm not sure where we can do it.

And I think, as Bill said, and this

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is what our mantra is, that we sincerely believe that a healthy and vibrant ecosystem also means healthy and vibrant fisheries. And so what we're really interested in having that happen here on the central coast, where we have these remarkable places and this remarkable sanctuary.

So I just wanted to give you a snapshot of where we are with that and where we are with the sanctuary management. And, with that, I'll open it up for questions or comments.

MR. BILLY: Okay. Comments, questions?

Yeah, Randy.

MR. CATES: My question is in Hawaii we have a sanctuary, a whale sanctuary. As we advance in society, as this morning we heard there's a growing need for production of seafood. We haven't really gotten to that point yet of the power to increase production, but I think some day we're going to get to

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that point where we have to have the nation start thinking about providing more food, as food security, there's a bunch of reasons.

How will the Sanctuary fit in there and how will they allow and incorporate new technologies, in particular, aquaculture, because in Hawaii our sanctuary has pretty much put a blanket 'Not in our sanctuary' and have been very forceful on that. So my question is we have aquaculture, we have wind energy, we have all these competing uses. Does the sanctuary program have an open mind on that and can it coexist or is it going to be just 'This is my area and you guys stay out'?

MR. DOUROS: Yeah. So that's part of what you're identifying, is part of this multiple-use challenge that we face, is in one of my earlier slides that we promote multiple uses to the extent they're compatible with the goal to resource protection.

And so the challenge is -- it

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depends on your perspective, right? If you're looking at it from a national perspective and you look at the country and you look at these 3 dots that are sanctuaries, some big, small, you might think, well, there's got to 5 be space in there to allow oil and development, right, because that's a competing use, all kinds of fishing, discharge and 8 disposal from harbor dredge materials, building fiber-optic cables, wind turbines, 10 11 energy, aquaculture, et cetera, wave The uses are many. And you might **1**3 look around the country and think, well, okay, most of those can take place in most waters, but maybe many of those, not all of them, 16 won't take place in National Marine Sanctuaries. designated 117 Those were by 18 Congress and the Agency as special places for the purpose of protecting the resources there but allowing human uses to the extent they're compatible.

So we look at most of these issues

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COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 if not all of them on a case-by-case basis.

There's no one policy that says in no way can

you have no oil and gas development. Most of

these prohibit oil and gas development. The

Flower Garden Banks allows it and the Channel

Islands regulations allow it and, to some

extent, the Gulf of the Farallones would allow

for some aspects of oil and gas development.

Wind and wave energy, a brand new technology, we're in the middle of assessing that.

Aquaculture, again there's no blanket policy that would prohibit it in sanctuaries. In some places other communities are very concerned about it, depending on the type of aquaculture activity that you would have.

For instance, one of the things we're very worried about are non-native species aquaculture projects. A native species aquaculture project in a sanctuary may not be nearly as bad as one where, let's say,

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you brought Atlantic salmon to the West Coast and put those in a National Marine Sanctuary. NMFS alone might not, NOAA alone may not like 3 that, but if it did, in a sanctuary, maybe we would avoid that kind of activity in 5 sanctuary. So these are all evaluated on a case-by-case basis. There aren't really any broad 'no-no's in terms of activities. There are just prohibited activities that are broad Don't disturb the sea bed, 10 by definition: don't have discharges into the sanctuary. And in almost cases we can issue a permit for an **1**3 activity otherwise prohibited, depending on 14 the special circumstances and if it met that target goal of not having an appreciable 16 impact on resource-protection qualities.

MR. CATES: Just a follow-up to that, I would highly encourage the process of how you make those decisions, my experience is it's very flawed in Hawaii. It's not science based. In fact, when they make -- they have an aquaculture committee, but won't allow

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1	anybody from the aquaculture industry to
2	participate on these meetings or discussions.
3	And we have a wealth of knowledge that we can
4	hand to them to show that we're not these big
5	dangerous and scary thing, and there's a
6	shoved door saying, 'Oh, we have a committee
7	that will look at that.'
8	MR. DOUROS: That shut door, is
9	that a state-driven process or one that the
0	sanctuary program runs?
1	MR. CATES: It's a sanctuary
2	program. So our biggest concern is the
3	process, allowing this interaction of
4	communication and technology, whether it's
5	aquaculture or wind, how you make those
6	decisions are vitally important.
7	MR. DOUROS: And just so that I
8	know how to follow it best, are you talking
9	about the Humpback Whale National Marine
0	Sanctuary?
1	MR CATES: Vec

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MR. DOUROS: Okay.

MR. BILLY: Ed.

MR. EBISUI: Thank you.

I just wanted to make a couple of comments. You were speaking of the Humpback Whale Sanctuary, which is between Molokai, Oahu, and Maui. I was just speaking to some And it seems that this federal officials. year, which is pretty typical, the whale strikes Humpback whales have on been predominantly by ecotour boats, not fishing vessels, not tugboats or barges or any other type of commercial activities, but the whale watching tour industry account for about 80 percent of the strikes.

With respect to the Northwestern Hawaiian Islands Monument, I personally have no problems with it being a sanctuary as it was envisioned under the Clinton Administration, but when it became a monument what it did was it curtails all fishing in the area. And we have a highly sustainable, environmentally friendly fishery, no

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interaction with whales, birds, mammals,
that's going to be kicked out come 2011. All
of the fish that's -- half of the deep water
bottom fish that's produced by the State of
Hawaii comes from that Northwestern Hawaiian
Islands, so that fishery is going to end,
which is going to increase our dependence on
imports from other areas.

And the monument also opens the door to and encourages ecotourism, including cruiseliners, which will be bringing seaweed, algae, and who knows what else with them, not to mention also the environmental effects of anchorage, mooring, and everything else. It just seems to be so incompatible to curtail healthy, responsible, sustainable fishing and then to bring in the passenger liners into a so-called pristine place like that.

Any thoughts being given in the Service or in the Agency about the obvious conflict between allowing, encouraging tourism in an otherwise pristine area and at the same

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time curtailing fishing?

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MR. DOUROS: Yeah. So you had three points. And just on those, that any strikes on whales are a big deal, not only to the Sanctuary Program but to the National Marine Fisheries Service. It's very concerned about that. We both have a management responsibility there, and so that's nothing we're excited about. And obviously those are enforced pretty aggressively.

The decision on fishing was made by the President, so that was -- you know we then had to work with that.

We had various alternatives that were into EIS as a sanctuary. That was one of them. But there were other ones that we were assessing that would have allowed some level of fishing.

And the third point, though, on ecotoursim, I know that that is a very significant concern to us. And I know the Monument staff are working very hard to come

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up with some sort of a program that will not cause those problems you're talking about.

As a matter of fact, I think we've gotten a lot of grief back from researchers who have to go through pretty extensive efforts to even get a research ship into the sanctuary, into the Monument, and that ecotourism operators are similarly concerned because they don't want to clean the hull each time they go in. They don't want to, and some can't hold their ballast water --

MR. EBISUI: Ballast water.

MR. DOUROS: -- discharge in there,

I would say their sewage and gray water

discharge, it's very difficult. Very few

ships can handle that. And those are the

limits we're putting on them. So to whatever

extent that's a plus, if it's a consistent

level of pain that's designed not to create

pain but, rather, to protect the ecosystem.

I don't know that there are final rules out that actually promote it as opposed

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to trying to, if it's allowed, ensure that there aren't any of these unintended ancillary impacts.

MR. BILLY: Patty.

MS. DOERR: In regards to the federal roadmap that you have up there, do you guys have plans and analysis of the available science that you do have in terms of habitat data and fisheries data and all that, so that you can have some sort of, I guess, staff analysis -- would be the best way to put it -relying you're not just on the available science, but you can go out there and get some additional data and science that make better-informed you may need to decisions?

MR. MICHEL: That's right. One of the first steps we're embarking on is to get a baseline of the most current information, as well as look at what are the current management measures that are in place as a starting point for analysis.

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So, for example, we're exploring the idea of this integrated ecosystem assessment as a way to build the data that cannot only serve our needs but maybe also NMFS' needs. We're looking at this by each region.

MS. DOERR: And then to take that a step further, you can go and then get that data that you identified as a need. So the best available science becomes even better? I mean is that kind of the overall --

MR. MICHEL: That's my hope. Yeah, I think we have to look at that, that the seascape in effect has kind of changed since this issue was raised seven years There's less fishing that occurs in sanctuary; there are all these new management The largest troll permit holder in measures. our sanctuary is the Nature Conservancy. yet we still have these unmet ecosystem needs, but we're going to look at that starting point for where we look at additional

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protections that may be needed. And that includes the latest science that we can get a hold of.

MR. BILLY: Bill.

MR. DEWEY: I'm Bill Dewey with the Taylor Shellfish Company in Washington state. just wanted to echo Randy's concerns earlier. A number of years ago NOAA was looking at a marine sanctuary for northern Puget Sound and I participated in process. And, as I recall, it was a number of years ago, but obviously we were concerned about our future, being able to farm shellfish in that area if it got designated and was basically told by NOAA that it would be a stakeholder-driven process, and the loudest, most effective voice ultimately prevails at the end of the day whether you get to do it or not.

So it's like get in and fight as hard as you possibly can. It just seemed that was a very intimidating invitation to the

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process which was flawed in my opinion. But we fought hard and ultimately a lot of --

MR. DOUROS: And you prevailed, right? There's --

MR. DEWEY: -- people shared the same concern, the fishing community and so on shared the same concern.

MR. DOUROS: Yes.

MR. DEWEY: So we said, you know, no thanks, we pass on this and pushed hard to not have it happen because of those concerns.

The thing related to that is just that NOAA's all one agency. It has a lot of different stovepipes within that agency and we've worked hard, MAFAC has asked NOAA recently to develop a ten-year plan for marine aquaculture development. Clearly increasing domestic aquaculture production and domestic seafood production in the United States is important to get away from this reliance on imports and so on. And I would hope that within NOAA those national priorities would

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cross between these stovepipes and that NOS and the Marine Sanctuary Program will recognize those needs and try to somehow prioritize that use when it's compatible within the sanctuaries. My thoughts.

MR. DOUROS: Yeah. Maybe it was said many years ago there, but our view today, I think it was true back then but you never know and as word gets passed on, is it's not -- the stakeholder process isn't one where the loudest voice prevail. Oftentimes people in the process behave that way. 'If we show up, we have a lot of folks there, we scream and yell, we'll get our way,' and we really try to discourage that. You know the stakeholder process works when everyone shares interests. It's that true concept of interest-based discussions rather than positional discussions.

And we often encourage everyone to look at solutions as one you could live with, not your favorite, but can you live with it,

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and if you can't, let's fix it so that -- we get pinged on, frankly, from people in the Office of Management and Budget in the White House that our process takes too long and it leads to less than crisp results -- that's what I've heard before. And so the other side of it is to get everybody at the table and work it, work it, work it and at some point you've called the question, you make a decision, it's a crisper result, it happens quicker, and you get lawsuits and ticked-off parties, et cetera.

So we don't often get sued. We take longer than we probably should. And we have sometimes little squishier results. But, by and large, constituents can live with the results that we come up with.

And I think maybe that's an example in the Northwest Straits there where it does still exist in some format, a sanctuary concept, it's just not run by the Sanctuary program and there's an earmark that one of the

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1	senators gets every year and local
2	governments, by and large, run that. Maybe
3	that's okay.
4	MR. BILLY: Two more. Heather and
5	then Tom.
6	MS. McCARTY: Thank you. I'm
7	Heather McCarty and I'm from Alaska. And I
8	have kind of a series of related questions.
9	One is, the first one is, are these sanctuary
0	designations ever initiated by the
1	stakeholders or are they normally initiated by
2	the federal agencies?
3	And, second, once the designation
4	is made, for example a monument designation,
5	is that ever changeable? Is it changeable by
6	stakeholder initiation or is it changeable by
7	federal agency initiation, or can it be
8	changed?
9	And, finally, within those
0	designations, the particular rules for each
1	one of them, which you indicated were
2	different, and I know that's true in various

places, are they changeable and, if so, what is the process that one would have to go through to change those usage regulations?

MR. DOUROS: Yeah. So on the first question, the one with the sanctuaries, this one in particular, Monterey Bay, is entirely a bottom up. The citizens came and beat up on NOAA for years, long before I worked for NOAA, that 'We want to have a marine-protected area sanctuary here.' And in the end they can't do anything. Either NOAA, the Agency -- in this case the Department of Commerce designates to NOAA that it can go through a process to designate a sanctuary or Congress can either do it or compel the Agency to designate it.

And so most of them, I think eight of the fourteen or so came from the administrative process. The others came from Congress directing that it be done.

The second question I think was once they're there can they be...

MS. McCARTY: Either changed like

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from a sanctuary to a monument or --

MR. DOUROS: Right, right.

MS. McCARTY: -- or back or done away with entirely or...

MR. DOUROS: Yeah. So monuments may only be designated by the president. That's part of the Antiquities Act. And they've only been used very recently with the Northwestern Hawaiian Islands and then these other three in the ocean.

The sanctuaries, as I said, are designated through the National Marine Sanctuaries Act. And it's theoretically possible that a monument -- again, it's new -could also then be designated as a sanctuary. In fact, President Bush directed NOAA to do just that by first creating the Rose Atoll Monument and directing that it be converted to a sanctuary, and that's the process that we're going through now. So you can go in that direction. You don't really go the other direction. There wouldn't be much οf

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precedent, I suspect, to go the opposite direction.

They could in theory qo away, though I don't know if we've got a procedure for exactly how that would work. That's never happened before. You could shrink the boundaries, you could change the regulations within them through an administrative process. And I don't think they've ever been shrunk The regulations have changed, appreciably. though, often.

And what we've typically found is that there's a lot of nervousness in many communities when these things are designated, but over the years they realize actually this isn't all that bad. And we have communities asking us coming to us to expand the boundaries and expand the regulations, them more protective or more this or more that. And so that process to regulations, which was your third question, the sanctuaries when they're designated are

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very customized, the regulations fit the needs at the site, and there's no one way that it's got to be. The community's got a huge role in advising us on how that takes place.

And then each five to ten years we're supposed to be modifying and revising the management plans, that Paul just mentioned, we just completed in the central coast, and that process includes an evaluation of the regulations. And for this process, this Sanctuary there were 10 or 12, 10 regulations, there now are 14. And of the 10, three or four of those were changed to make So, again, that's a very open them better. process. They come through the public-scoping process through their advisory council who advises the superintendent. Then it goes out in an environmental impact statement. There's six or seven opportunities to comment on those regulations.

I think most people would tell you whether they like the result or not, they

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certainly don't fault us for having a chance to comment on it and have a shape in the outcome.

MS. McCARTY: May I, just a follow-up? One of the fears in Alaska and I'm sure elsewhere is that once you have a designation of any kind -- this is just sort of a general fear -- that it's established and then may have sort of easy-to-follow rules and then it gets progressively more stringent and progressively more difficult, particularly for the fishing community. So that's a huge fear.

MR. DOUROS: Yeah.

MS. McCARTY: So I just wanted to kind of explore which direction it usually goes and how it can change once it's in place.

MR. DOUROS: Yeah. So, for instance, that was a big fear again here on the central coast, and we just updated these management plans. We changed, as I said, added four or so new regulations, changed two or three others, and those don't affect

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1	fishing. That was the original designation
2	here, was that we weren't going to regulation
3	fishing. We've gone through that process and
4	haven't changed that requirement. In fact, we
5	had two or three fishing issues and we solved
6	those by going to the National Marine
7	Fisheries Service and/or the State of
8	California and found solutions that we were
9	both happy with under their regulatory
0	authority. And that's, by and large, very
1	acceptable to the parties whether they're
2	fishermen or fish processors or regulatory
3	managers that have a fisheries-management
4	responsibility accept that. That's okay, that
5	we bring issues to them and they solve it with
6	their regulations.

MS. McCARTY: Okay. Thank you.

MR. BILLY: Okay. We need to move on, but, Tony.

MR. DiLERNIA: Heather asked my question. Thanks.

MR. BILLY: All right. Randy, can

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you deal with it at the coffee break or do you want to...

MR. CATES: I think it's important.

MR. BILLY: Okay.

MR. CATES: Just real quick. One observation we're having in Hawaii also is what we view as the mission creed. As a whale sanctuary is inadequately funded and trying to find new sources of funding, they're seriously expanding their mission not to just humpback whales but now to other species as an avenue to bring in more funding. And that's a big concern to a lot of the user groups, fishing. For example, they're looking now at fish species to manage and not just whales.

MR. DOUROS: Yeah. So I could tell you with a hundred percent certainty that issue of expanding their responsibility is not to increase funding. That's not how the system works for us. That would actually probably work against us -- if that was our goal. Because as it has worked in the past

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and other places, that's not part of what we go after.

Т know there that the public process that leads to input as to what to do when we revise a management plan, we got considerable input, including from the State of Hawaii, that we should consider -- not to certainly do -- but consider adding other marine mammal species. And I think there were some comments about more than just marine mammals. Right, adding turtles and maybe fish, et cetera, to the sanctuary. And so we're assessing that. What does it mean, we've got an advisory council that's advising it.

And it's not to say that everyone would agree with that. It sounds like you have considerable concerns if that mission were to move from just whales to more species, but we do get many people telling us, 'You're not doing enough, you got to do more.' We hear all the time, Paul hears all the time

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while he hears from fishermen, 'Whatever you do, don't regulate fishing,' he hears from an even bigger constituency that says, 'You're failing until you regulate fishing,' and we get that. I call it sort of the Goldilocks scenario, right, where it's too hot for some, too cold for others. And sometime in the middle where we started is not a bad place to be.

I know that's what's going on in Hawaii and we're assessing what does that mean. But I just want to make sure you know it's not to get additional funding. That doesn't help us at all.

MR. CATES: It's openly being discussed in the meetings --

MR. DOUROS: Yeah.

MR. CATES: -- as an avenue for more money. I mean it's not a secret to anybody, they're openly saying, 'We expand our mission, then we can get these different sources of money to support the overall

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1	objective.'
2	MR. DOUROS: They may be coming
3	from others. I know in the Sanctuary Program
4	we don't view that as being an outcome we
5	intend or are seeking for that purpose.
6	MR. BILLY: Okay. I think we need
7	to move on.
8	Thank you very much.
9	MR. DOUROS: Thank you very much.
0	MR. BILLY: That was very
1	informative.
2	Alright. Next we're going to hear
3	from Churchill Grimes, from the NMFS Santa
4	Cruz Lab, talking about the collapse of the
5	Sacramento River Fall Chinook Fishery.
6	Churchill.
7	DR. GRIMES: Good afternoon. I'm
8	Churchill Grimes. And I direct the National
9	Fisheries Service Lab that's at Santa Cruz.
0	It's one of three elements of the Southwest
1	Fisheries Science Centers, about 50 miles

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north of here. And the next time you have a

meeting here, we'd be happy to have you. We have facilities actually nicer than this, and we probably would only charge Headquarters half as much.

(Laughter.)

DR. GRIMES: So if --

DR. DICKOFF: We'll be there

tomorrow.

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(Laughter.)

DR. GRIMES: So at least if you live on the West Coast and you haven't been living in a cave, you've probably heard about the collapse of the Sacramento River fall Chinook salmon fishery, probably a lot more about it than you'd like to hear. So what was the problem? Why did this happen? This slide shows in-river harvest on the top; the ocean harvest in the gray bars, portion of the bars; and escapement, which is a salmon fishermen — the salmon science lingo for the number of animals that escape the fishery and actually turn to the freshwater to spawn.

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And in 2007 the more or less unprecedented low returns to the river caused the Pacific Fisheries Management Council to close the fishery on the entire West Coast, which has never been done before. And as a consequence of that we were -- they asked the National Marine Fisheries Service to convene a working group that would consider the causes of the decline. They offered us a list of about 50 reasons that they thought it might be. And so we did form this working group.

Incidentally, the actual return in 2007 was 88,000 fish. The projection for 2008 was 66,-. And it turned out to be -- the realized return was like 120,-. The conservation standard we expected -- one of these is 120 to 180. So, in fact, in 2008 it was so low so that the fishery was still closed in 2009. But we started this process before the decision was made this year.

This is the constitution of the work we did, myself and John Stein, this

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gentleman on my right, who was also a cochair. We had quite a few NOAA members from
the Northwest Center and the Southwest Center.

One person from OAR, a climate person. We
had representation from the Council itself,
California Fish and Game, Oregon Department
Fish and Wildlife, Washington Department of
Fish and Wildlife, U.S. Fish and Wildlife
Service, and a few academics: Lou Batsford
from U.C. Davis, Dave Hankin from Humboldt
State, and Jim Anderson from University of
Washington.

So we didn't go out and collect the regional data to do this. We used existing information, so we sort of used a -- did a meta-analysis. And this is a conceptual approach we used. We used a lifecycle approach. These are all the stages in life history, the eggs, et cetera, in hatcheries in captivity. And these are the stages for the natural-spawning fish. And these are all the potential reasons, or environmental factors,

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man-induced factors that might impact various life stages. So our approach was to sequentially work through the different 3 life stages, looking for a set -- looking for change from the long-term average in abundance of different life stages and to take a similar approach with these man-caused and natural factors to sift our way through those and look for a sudden departure from normal conditions 10 long-term average conditions in reasoning that the likely cause lay at the intersection of these two things.

So things apparently went wrong between the fish entering the Bay and the time they returned from the ocean to regroup at age two.

This slide summarizes the abundance for the different life stages. And what I've done here is this is shown as a fraction of the average, so it's a way of just standardizing the data, so that the numbers don't look real different, because they were

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all different kinds of measurements.

So the blue line is the average, the long-term average. And you can see the parental abundance for 2004 and 2005. And these were the brood years that we were concerned with. 2004 brood year actually enters the ocean in 2005. The 2005 brood year actually enters the ocean in 2006.

parental abundance So wasn't different from the long-term average, nor were hatchery releases from the five hatcheries in Central Valley. The catch-per-unit the effort, this is a survey that the U.S. Fish and Wildlife Service has operated for many years in the Delta and the Bay. And again the catches were not radically different from the long-term average, yet as you see here suddenly there was a big drop in abundance.

This is Feather River hatchery's survival of -- these are hatchery fish returning to the hatchery. It was -- they were low. Jacks meaning two-year-old fish,

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the precocious males coming back, they were low. And, of course, the adults, the actual escapement to the fishery, was also unusually low.

Well, what was unusual that environmentally was the California current was very weird in 2005, so much so that there was a whole issue devoted to this from geophysical research letters and sort of scurrilous -- these slides -- this slide from that journal that one of the things they talk about was sea lion foraging, which was very unusual in 2005. The sea lions were foraging way offshore, as opposed to the normal pattern of foraging in close to shore. Emaciated whales were observed. This panel up here seabird nesting. This shows shows the breeding success in blue in the upper graph. And you see in 2005 it was a zero. And sort of the opposite of that abandonment rate. the abandonment rate was a hundred percent in 2005. These are castings off-lets. These eat

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juvenile pelagic juvenile rockfish primarily, the same thing that juvenile salmon eat.

And in this lower right panel this is data actually from a survey that we've conducted in our lab for over 25 years of pelagic juvenile rockfish primarily, but it catches other species of groundfish, too.

And the color codes are just different species, so that really doesn't matter that much. The point is in 2005, there was a record low, lowest in the 25-year time series. And this is just the sum of all the juvenile fish, and the abundance was the lowest we had ever seen.

This slide shows coastal upwelling, another thing that was unusual. These latitudes, these brackets, Oregon north and south here. This is Northern California -- the end of Northern California. And this latitude is about where we are right now in Monterey Bay.

The cumulative upwelling is shown

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in different -- it's color-coded. Green is 2005; red is 2006, 2007 is blue. And the black line is the long-term average. So you can see that in 2005 the upwelling, the cumulative upwelling, was well below the long-term average about the end of Oregon.

And the down low, also well below the long-term average in California. Again it started late and was well below the average. And the same for Central California. And it's important to say that it's not only the fact that the upwelling is low, which is the productivity that drives the whole ecosystem, but the fact that it is low off Oregon means that the water being transported down the coast to California is also unproductive.

So 2006, also a brood year we were concerned with, wasn't as bad off of Oregon, although it got started late, it started late in the year. But in California it continued to be pretty bad. It was below average most of the time and especially here off of Central

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California it was low. And 2007 was a pretty normal year. Things got back to the way they had been in the past.

Sea surface temperatures off of California actually have been warm ever since, well, 2003 through 2006, but they were especially warm off Central California in 2005. This slide shows a condition factor. This is actually work that we've done in Santa Cruz.

We've done a survey of juvenile salmon off of Central Coast here for -- it lasted for ten years. And this condition factor is their weight divided by the cubal link. It's their relative fatness, you might say.

So these are the ten-year averages, these black spots, these white and black spots you see here. And the solid line is the --just the 2005 data. So you can see that these fish were in good condition or relatively average as they entered the estuary and they

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exited the estuary they were still approximately in the same average condition.

But by the time they reached the ocean in the summer, they were well below what had been the long-term average condition. And by the time they had been in the ocean all summer they were back to about average condition, most likely because the ones in poor condition had died.

So just to sort of wrap this first part of it up, what we concluded was thus looking at the first part of it was that in spring of 2005 and 2006 the Sacramento River fall Chinook entered the ocean in very poor ocean conditions, poor upwelling, poor sea surface temperatures which made the oceans unproductive. And the normal food chain it develops and the supply of food for juvenile salmon, seabirds, juvenile rockfish, basically instead of finding a feast they found famine and they all starved or a large proportion of them starved.

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And this resulted in the low survival that we observed to age two and older. So the working group contributed the approximate cause of the failure of these two brood years, 2004 and 2005, to poor ocean conditions.

It's not to say that we are ignorant of other potential problems in freshwater, which I'll talk a little bit about now.

So what was the role of some of these issues in freshwater that you've all heard a lot about, read a lot about in the newspaper, I'm sure, hatcheries, habitat, and so on.

I put this in here, because if you live around here you heard a lot about this. The water pumping from the Delta, pump, pump, pump. Everybody wanted to blame the water pumpers. And, believe me, we don't intend to be apologists for the water pumpers. We don't think that's a good thing, either. But just

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to show you, we did look at that. The upper panel in this confusing slide, you could probably ignore. This is the total exports from the Delta. And the lower graph is actually a better measure of this issue.

It shows you the water exports relative to the inflow. So it's a much better measure, you know, what's going in to what's being taken out. Actually it's a better indication of water that's available there for the fish. The dash line shows the upper and lower limits that have been observed before pumping. Color-coded for -- 2004 is green, '05 is red, '06 is blue, and '07 is whatever that color there is. And the dark black line is the long-term average.

Well, anyway, what I want to show you is that -- and you heard this a lot and you read this a lot in the newspaper -- that all these pumping rates were way higher than the normal. And that's true, and this is during from about July on. But back here in

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the spring, in May and June, you see that most of these rates are down below that black line, so they were actually pumping less than they usually pump. And why that matters, this slide shows you when the out-migrants were actually in the river system. All you need to pay attention to is the dots there. They represent the individual fish in 2005. And the different colors are just different runs, and hatcheries, and that sort of thing.

But the take-home message here is that you see the fish were in the river from the late winter through the middle of June. So the fish were gone from the system when they were pumping a lot of water out of the system.

Another thing that you might have heard, if you were following this in the paper, was that they truck the fish around the Delta. Fisheries put the fish in the trucks and take them around the Delta, reasoning that the Delta is in such bad condition that the

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mortality rates are horrendous. And I think that's probably accurate. But there were other problems associated with trucking that I'll get to in a minute. But, in any case, they do it.

And then they bring the fish down and they place them in acclamation pens, floating pens. And they leave them there for a relatively short period of time to acclimate to the conditions in the Bay before they cut them loose and let them go on their merry way.

And so this slide shows the total releases in blue, the proportions released in the Bay and the proportion in red here that was actually placed in pens.

Well, Fish and Game was severely criticized for -- in 2005, you see, they didn't acclimate any in the pens. And everybody was, you know, concerned about that. Well, that was really a potential cause of the failure of the brood year.

But if you look back here in 2002,

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they put very few in the pens in 2002. And that was a record return here to the system.

There were like 800,000, almost a million

Chinook fall run that returned to the system.

And so it's not entirely clear what the role of pen acclamation was. It doesn't appear to be an obvious cause.

Now some things that probably do matter a lot. Let's -- this slide shows the abundance trends in the Central Valley Chinook population. And there are four runs, four distinct runs in the system. There's the fall run, which is the main-stem run. The spring run used to spawn in the streams that drain the Western slope of the Sierra. Winter run, it spawns in the northern -- Sacramento River above Shasta Dam in the late fall. And so these are all color-coded on here. The fall run's in blue. Late fall is green. The spring run's red, and the winter run's black.

A couple things I want to point out here, is that the dynamics of all these

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blue fall runs is very synchronous. They all go up and down together. They all collapse at the same time. The only thing that's really different, Clear Creek that this is a natural population that -- where there's been a tremendous amount of habitat restoration done.

Another important thing to is that the other here runs are synchronous with the fall run. They don't appear to do the same thing. And the third thing here I wanted to show you, is that there life different histories in these are different runs. Spring runs, for example, some of them are the -- they go out yearlings. They're so small when the spring comes that they're -- they over winter come out as much larger fish and are better able to sustain bad conditions, should they encounter those.

So the size the ocean entries can be different. And the timing of out-migration can be different. So why this spreads the

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risk is that -- if everybody is doing the same thing, there, you're at risk of coming out into the ocean and encountering the perfect storm where all the conditions are misaligned or are precisely aligned as opposed to having more runs than the average is a sort of bad-hedging strategy that spreads the risk of encountering bad conditions in the ocean.

Well, is it that's what synchronizing all the dynamics Chinook population? Sacramento River fall Well, this shot shows that hatcheries, as a proportion of the total releases to the system and the total returns, I mean, and you can -the point is just that hatcheries have become an increasing proportion of the total returns to the system.

And this is actually a fairly gross underestimate of it, because many of the fish stray and don't actually return to the hatcheries. They go astray and spawn in natural areas. So it's really probably a lot

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worse than this.

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Well, the hatcheries, they tend to reduce diversity. Hatcheries tend to simplify and standardize the environment. They try to be as efficient as possible. They do everything the same way, tip all the eggs the same way. The fry are placed in raceways and they're fed pelletized food in the same amounts and at the same time.

And, as I said before, juveniles are actually taken and placed in and trucked around the Delta trucks released into pens, in floating pens. Well, what does this simplification do? One thing, it produces this very high correlation in survival among hatcheries. But this also means that there is going to be a high variation in survival as the environment either lines up or fails to line up -- in the case of the 2004 and '05 brood years to line up with the hatchery operations.

Another issue is domestication

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selection for behavioral deficiencies in hatcheries. For example, the fry are fed pelletized food. They don't know how to -- their foraging behavior is virtually nonexistent. They don't know how to avoid predators. So that -- and this is part of the domestication selection problem.

Another big problem is all-site releases, this issue of trucking. When you truck the fish around the Delta they're not able to imprint on their native streams or So they don't know where hatcheries. return. They come back and they stray all over the place. And this tends to homogenize genetically. And them when they're homogenized genetically this tends to not give them an opportunity to become locally adapted to the place they originally were spawned. And so this reduces this life history diversity within the run.

Another issue is habitat degradation, which also reduces life history

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diversity both within the runs and among the runs. Dams are an obvious one. I think one of these pictures is of Shasta Dam, as I said a minute ago. The winter run used to spawn above Shasta Dam. Now the only place the winter runs spawns is in the tailrace below the dam.

Also the spring run, which is historically the largest run in the system, used to spawn above the rim dams. Now all of the streams, virtually all of the streams that drain the Western slope of the Sierras, have these dams which have no fish passage around them.

The Delta. The Delta was originally a 1500-square-kilometer tulle marsh that had a good habitat for rearing. Now the Delta is a series of ditches, with big ditches with armoring along the edges, dikes, and what-have-you, so that the all channel habitat for rearing is no longer accessible by the fish and doesn't exist, for the most part.

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All of these things have tended to reduce life history diversity. For example, among runs, of course, the spring run can't get up to its natural spawning habitat, the original spawning habitat, and the winter run can't either.

And then within the fall run, -when you reduce the amount of habitat that's
available, you reduce the opportunity for
local adaptation and having life history
variation.

So this sort of -- this was a contrast, just to show you what is desirable. This is what you'd like to have. This is just some results from Bristol Bay sockeye fishery in Alaska. And these show, you know, the abundance trends in these different populations through time.

And the point is just that you see that they have retained the diverse life histories among these different populations.

The dynamics in these populations are not

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correlated. They go up -- there's a lot of variation when they're not going all up and down at the same time.

And so that's the point I just made, non-synchronous shifts in population abundance. So this dampens the overall variation in stock abundance and the harvest that you take from it. This is probably never attainable again in the Central Valley, but this is the desirable condition.

So in coming to an end here, this conceptual model of what think is we happened in the Central Valley with the Sacramento fall run. In the top picture here a declining freshwater habitat we have productivity, due to the habitat loss and degradation. Going down, we have constant hatchery production, at least once they began to do it.

And see here declining fitness, due to things like domestication selection in the hatcheries, straying, loss of habitat -- I

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mean the habitat degradation. A number of these things don't allow for local adaptation among the populations, and they become less fit. And they're all the same, so fitness is going down.

Increasingly variable climate, I mean, this is a prediction of global warming, that it's going to become more unpredictable.

So, for argument's sake, we put that in here.

So salmon abundance will really be a -- population abundance will be the sum of all these things, or at least it will be the sum of natural and hatchery production, as it's modulated by the decline in fitness and this variation in the ocean environment.

And this is the situation we're in now, where the misalignment of conditions was low, but at some time in the future we'll have a good alignment with ocean conditions, and it will be back up. But the long-term trend is downward. I mean we'll have booms and busts, with declines in the booms and worsening

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busts.

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So we make some recommendations, a few, about what could be done to improve the situation. Really the easiest and the lowesthanging fruit, so to speak, would be hatchery reform. We recommended that we form a hatchery science review panel to review things like rootstock selection, production levels, rootstock and egg transfer, what the rearing like in the hatchery, their practices. No longer release them all at the same time, spread it out. This is the easiest thing that could be done, I think.

Another suggestion we had was to try to manage natural populations to increase diversity. I mean, actually if the Management Council could establish escapement goals for these natural populations. And the way we do it now is pretty much in aggregate.

The third recommendation was, of course, habitat restoration. That's another obvious one. Especially trying to restore the

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1	ecological function of the Delta, but there is
2	a limited amount you can do there. It's been
3	pretty well messed up, but there are some
4	things that you can to improve things.
5	And our last recommendation was if
6	there's never been a resource management
7	problem that cried out for a more holistic
8	ecosystem kind of approach, this is it.
9	There's a half a dozen different Federal and
0	state agencies that have regulatory
1	responsibility for the different habitats that
2	these fish live in. And, you know, we're all
3	going our separate ways, pretty much.
4	So an ecosystem-based approach is
5	pretty clearly called for to try to manage
6	this problem or solve the problem and
7	ecological risk assessment along with that.
8	And I think that's it.
9	CHAIRMAN BILLY: Okay. Thank you.
0	Bob?
1	MR. FLETCHER: Church, good
2	presentation.

DR. GRIMES: Thank you.

MR. FLETCHER: There was a correlation between the amount of freshwater outflow through the Delta and striped bass production. Is there a similar correlation that anyone has been able to see between freshwater outflow and salmon abundance?

And the reason I bring it up is they're now beginning to look more and more at desalination as a more realistic alternative to all this export of water out of the Delta. If, in fact, in the next few years more of that is allowed to take place in the South and less water is being exported, would that be a positive thing for the salmon? Would that help with that Delta, the function of the Delta?

DR. GRIMES: I think that people believe there is a threshold. I mean, there's not necessarily -- obviously if there's not enough water in the system, this is bad for the survival of out-migrating salmon.

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And if you increase the amount of freshwater in the system and you reach whatever this sort of threshold level is that's required for the fish to get out of the system, whether or not really high flows help out migration -- out-migrants, it is probably some, but I mean it's not going to be a straight-line relationship.

Now so -- but the more water you left in the system from -- if you're using desalination plants for supplying freshwater to the municipal areas outside the Valley, that would be a good thing. But, remember, that of this is most water used by agriculture. I think the number is -- that's stirring around is something like 85 percent of the water that's in it, at least in the water that's pumped in the Federal and the state systems is used Ag. So while we like to blame the Southern Californians for problems in the Central and Northern California, the truth is that the

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L	majority or it is used by Agriculture. And
2	it's not necessarily efficiently used. I mean
3	drip irrigation systems aren't necessarily
1	used. I mean there's no consideration for
5	what kind of crops are grown, the rights
5	MR. FLETCHER: We need to flood
7	those fields and get rid of that selenium.
3	DR. GRIMES: Yeah.
9	(Laughter.)
)	MR. O'SHEA: Thanks, Mr. Chairman.
L	Now when I was looking at your slides I
2	think it's number 20 it seems like the
3	fitness reduction seems to be a key driver
1	here. And I was wondering if you had looked
5	at that parameter in, say, Alaskan hatcheries
5	and are they seeing the same phenomenon?
7	And, if they're not, is that
3	because they're in Alaska or is that because
Э	maybe they have different techniques than are
)	being used down here?
L	DR. GRIMES: I don't really know
2	what the situation is in Alaskan hatcheries,

but I think Bob and other people know. There
have been real attempts to try to modify the
behavior of hatchery managers, introduce the
so-called nature's system for rearing the
hatchery fish where you did it in a more
natural way and you exposed them to conditions
that would allow them to learn to avoid
predators and to forage for themselves in the
wild.

And I think that that's sort of -well, you can probably speak to it better than
I can.

DR. DICKHOFF: Yeah, a key to that I think was the data that said condition factors and fitness. There's probably early ocean growth that's critical to their survival in the next year. We're looking more at growth hormone levels at those -- usually the first summer in seawater and using those to predict health survival for that group. And so that's being started in Alaska now. So that's being extended --

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DR. GRIMES: But I think that there definitely are hatchery management practices 3 that could be changed that would probably improve the situation. And I don't -- no, I don't want -- I mean one of -- probably the worst thing or the -- it depends upon your perspective, but this trucking, this all-site release is -- this directly creates homogeneity of the population and the population by straying from -- not returning to their natal, either hatcheries or natural spawning sites. And I don't think Alaskans do any of that, that I know of.

DR. DICKOFF: No.

MR. O'SHEA: Thank you, Mr. Chairman.

CHAIRMAN BILLY: Okay.

DR. HOLLIDAY: Church, one of the reasons I asked you to come and talk to the group is Eric's been leading this Fishery Disaster Working Group. So this seemed to be a real good case of, you know, a fishery

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resource disaster causing a commercial fishery failure. And Fisheries Services published a proposed rule on this.

And so one of the questions, in fact, I think he's going to be asked to look at is this sort of the public policy implication of what the research is showing. And that if you have these cyclical disasters -- you know, conditions that are creating these fishery disasters, is there a fishery disaster assistance or fishery subsidy policy, something analogous to what do agriculture for those lean years to help intervening -- to promote the fishery health with the help of the fishermen in the cycles that you call one where there's these correlations?

And so I think there's a question in front of us that we pose to the working group as, you know, under what conditions, under what criteria are these anthropogenic effects affecting the long-term viability of

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the fisheries? And that's something that I think MAFAC should consider as they look at the policy of the fishery disaster rule.

DR. GRIMES: Because there was one declared in 2007 when the thing was closed and Congress appropriated \$170 million, I think, of which I think somewhere around \$100 million was -- actually had been spent to compensate the industry for the economic hardships associated with collapse of the fisheries.

And then a few years before it was done in the Klamath River, as well. That was \$60 million to compensate for the losses in the Klamath system. And actually if you trace that back a few years, there was a -- water was released to the system in -- I mean, was used for agriculture. Adults died. Returning adults didn't survive. It was a poor spawning, so -- and it was, you know, three years later that they had a fishery just -- the fishery was collapsing. And the disaster was declared.

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1	And I remember the year after
2	the year after the water was the floodgate
3	was sort of opened for the farmers to use all
4	the water they wanted. And they made a big
5	thing out of not allowing that to happen. And
6	then there was so there was a disaster
7	declared for the farmers.
8	So you're sort of in this inner
9	cycle, and none of which makes you feel very
0	good as a taxpayer. I mean, you but that's
1	that's not my business, I guess, anyway.
2	It is the business of the Agency.
3	MR. SPEAKER: All our business.
4	DR. GRIMES: One kind of failure
5	followed by another.
6	CHAIRMAN BILLY: Randy Fisher.
7	MR. FISHER: That's okay. I'm so
8	excited about listening to Sam's presentation,
9	and I'll just pass.
0	MR. CATES: On your list of
1	recommendations you had four topics. Two of
2	them one was aquaculture or hatcheries as a

tool. The other was management of wild stocks. And then you got into ecosystem management and - off the top of my head. In Hawaii we call that the Oahu Baraha System. But I really don't see how my definition of that, it doesn't make sense any more, because you don't have control over the agricultural water, like you just explained.

It's a big buzz word that we all used, ecosystem-based management, but it doesn't really work, because we don't have control of all the other factors. So do you - my question then would be: Do you see a day that we are getting -- where this does come to realization, we have to have more hatcheries to keep a fishery? Are we going in that direction or --

DR. GRIMES: Well, we show a couple things.

MR. CATES: But that -- yet none of your four on your list to me don't seem realistic.

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DR. GRIMES: What I meant ecosystem-based management or a more holistic approach to management was, in fact, addressed in this issue of divided responsibility for different habitats in which the fish occur is exactly the problem. And it needs to be dealt with in a more holistic fashion. Whether or not that will happen is, you know, who knows? hatchery fish, increased hatchery More production. That's not a solution, no. don't -- I think that's not the solution at all.

In fact, given the same level of hatchery production, which has been pretty much what it has for a very long time, under good ocean conditions it supports a great fishery in California. And we had -- it's the largest salmon fishery on the West Coast of the United States. So not --

MR. CATES: So based on your numbers, a large percentage of them are hatchery fish.

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DR. GRIMES: That's right.

MR. CATES: So, as a society, if we wanted to increase production, then that would be where you would target the increased hatchery production; am I correct?

DR. GRIMES: No. I think if you increase hatchery production you'd get a very marginal increase in total production. That's what I just said. The hatchery production is sufficient to support a -- support very vibrant fisheries in California during good ocean condition years.

I mean, there is some limit on the carrying capacity of the ocean. You can't -- you couldn't -- I don't know what that limit would be, but if you continued to increase hatchery production, you won't necessarily get more returns to the river or fish in the ocean.

CHAIRMAN BILLY: I think we're going to move on.

Thank you very much for your

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presentation. And there's opportunity to talk some more, I assume, when Eric has his working group meeting. 3 The next three presentations deal with updates on NOAA budget, rulemaking, and 5 sort of a new legislative agenda. We're going to change the sequence a little bit. I'll first ask Alan to talk about 8 the upcoming rules and policy decisions, actions. MR. RISENHOOVER: Alright. Thank you, Tom. I hope everybody can hear me down 13 here in the corner. If you can't just yell, and I'll try and project a little bit more.

But what I thought I'd do today is just kind of run through the standard Magnuson Act update I've given you, I think, at the last two meetings and try and punch it up here a little bit, throw in a few curves so it's not as boring as some of the last ones.

But I do think, because the two

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previous ones, you know, there were some things that weren't really moving. You know, it's kind of the July thing. The July presentation and the November presentation kind of were the same. We could tell you a little bit more, you know, comment periods had closed and what some of those comment periods are.

But between that November meeting and now we've had four or five major things happen. So I'll spend a little bit of time on those and then also project a little bit into the future about what's coming up.

So the to-do list, as we've gone through before, we broke it into three parts. Priority one were the ones with the due date specified. The other two were lower priorities or just authorized us to do things.

On those priority one topics, those things that we had due dates on, I think last time we looked at this we were in the 50- to 60-percent range. So we're above that now.

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1	We're about three-quarters of the way done
2	with those.
3	And, again, some of those things
4	that we have gotten done were major actions.
5	So we'll talk a little bit more about those.
6	So, of course, everybody wants to
7	know, well, what aren't you doing? So that's
8	the four tasks that are delayed. And those
9	are, I think, pretty much still the four tasks
0	that have been delayed before.
1	The ecosystem research study is
2	cranking along.
3	The NEPA Environmental Review
4	Process, I'll talk a little bit more about
5	that.
6	EFP rulemaking and a hmm, the
7	salmon recovery plan may have actually come
8	out. So I need to check on that.
9	And then the three that are on
0	track, two of those are with the Weather
1	Service, so I'm not going to report on those.
2	But one is our final IUU

Regulations that I'll talk about a little bit later.

And then there are -- the one task that we don't have any milestones on, we don't know what we're doing, is this naming an international fisheries appointment that was authorized under the Magnuson Act -- or actually required under the Magnuson Act for January of 2009. There's been no action on that. And your guess is as good as mine as what's going to happen with that.

On the priority two and three tasks we're creeping up there a little bit more, getting a few more knocked off. We've got a number that are still in progress, things I'll talk about a little bit later, like the LAP guidelines, limited access privilege guidelines, ocean acidification studies still ongoing, and a few others.

The bottom one there attracts some attention, we'll -- you know, you were asked to do something, but you don't have any

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funding for it. What is that? Those are three studies. Some impacts of turtles -
turtle-excluded devices on the shrimping industry, a herring study, and a restoration study. So those were authorized with funding in the Act. We haven't gotten that funding.

So we're probably not going to do them.

So just show you all we can do a pie chart outside the Budget Office. We're up around 63 percent of everything done.

So let's go into kind of some of those major things I mentioned that have been done. The ACL NEPA Guidance. I'll give you update MRIP. Limited an on access, international fisheries, peer review. I'm going to add one to this that wasn't actually required by the Magnuson Act, but I think we need to talk a little bit about it in an introduction, I guess, to Eric's subcommittee, as we do have that proposed rule out on disaster programs. So that's one thing I'll mention at the end.

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annual catch limits, So just to remind you, was a new requirement. catch limits were to be in place to end overfishing. And we had to have accountability measures. So in looking at that, we modified National Standard 1. Our goal was to be flexible yet strong to meet the requirements of the Act.

So in doing the rule we took into account the items that are listed there, obviously, the biology and the ecology parts of it, what science do we have. Do we have overlaps in management jurisdiction either with with international states or organizations? And how did the resource users interact with it? So where we are with that, just to recap, again we had a proposed rule out over a -- oh, about a year ago. get 158,000 comments on that rule. It took some time to go through those. Thanks to everybody for the cards and letters. So this is one big thing. We did get the rule in

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place. We published it January 16, 2009 right before another big date, which was January 21st, 2- -- January 20th, 2009.

So we did get for a while hung up in that: Is the new administration going to review the old administration's rules? So there were briefing conversations. Sam probably knows the backroom conversations on that more than I do.

But the new administration decided not to ask us to put that rule out for additional public comment. So it did go final in February, and we're working under it now.

So on the implementation side of things, those of you are familiar with the rule know this. But we need to have those annual catch limits in place for all stock subject to overfishing, by 2010. So that's what the councils and the Agency are working on right now, is getting that provision in place. There are 41 stocks around the country subject to overfishing.

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So we're going to be looking at those stocks, tracking them, seeing how the councils are doing. And the Secretary has a couple on implementing annual catch limits for the 2010 fishing year. So there are 41 that are our target.

The other part of that is the Act included a couple exemptions or exceptions from 2010 requirement for stock subject to overfishing. The first of that was for stocks with a life-cycle less than one year or about one year. Pink shrimp in the Gulf of Mexico was in that category. But we've just got some new signs that say maybe the stock assessment wasn't right on that. So pink shrimp isn't subject to overfishing, so it won't have to be done.

The other one are stocks managed under an international agreement. We and the councils are going through those stocks now to determine is there a regional fishery management organization managing that stock?

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If so, that would be exempt from the 2010 requirement, as well.

So that's the ACL rule. Do you have comments or I mean questions, you know, stop me as I go, or we can talk a little bit at the end. But that was our first major accomplishment, just in the last three or four months, was getting that rule out.

Secondly, the Act required that we, in consultation with the councils revise and update our procedures relative to NEPA. We put out a proposed rule on that. And what we were supposed to do is outlined here. It was to conform the timelines, better blend NEPA and Magnuson Act into a single process.

For those of you familiar with Magnuson and NEPA, they don't quite mesh in their timelines. So our work was to try and mesh those things. We did issue a proposed rule, got the standard 150,000 comments on it. This is one we never went final with the proposed rule — with the final rule on no.

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In December the Bush administration decided that they didn't want to put anything out before the next administration. And what we did in December is we withdrew that rule from OMB review. So the proposed rule is still out there. We've got the comments on it. And we're trying to decide, should we go forward with the final rule? That decision hasn't been made by the new administration yet. So we're in a bit of a holding pattern on the new NEPA provisions. One thing I'll add, though, is there is a NOAA Administrative Order on NEPA, which are internal processes, what we followed to implement NEPA.

And we are with Paul's group, PPI, looking at possibly revising that. So we've got a work group revising that or looking at revising that. So that may be some action. But still meeting this Magnuson Act requirement, we haven't met it yet. And I don't know that we could meet through the NAO requirement or not.

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MRIP is another one of those things that is a big thing, since we spoke last. Again, the Act required us to improve the quality and the accuracy of it, had to take into account the 2006 National Research Council's report. And we were to establish a regionally-based registry for recreational fishermen around the country.

So we have a proposed -- had a proposed rule out on that last year. We took comments through August. I don't remember if we got the requisite 150,000 comments on that one or not. But I'm sure we did get quite a few comments. We do have a final rule that went into place in December. And it was effective in January as well. The new administration didn't review that or send it out for additional comment.

The one key thing is, while we've established the new program, the registry itself won't go into place until 2010. So there was a year delay on that.

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There's an implementation plan that's been put together and finalized. And that's up on the website. So the MRIP program is up and running now, but the registration will start in 2010.

Limited access privilege programs. As I've talked here before, our goal was to double such programs by 2011. We're currently at 12; we should make the 16 by 2011. In addition to a report that Mark Holliday was co-author on, on the design and use of those, we've been considering whether we need to do formal regulatory guidance on the new LAP provisions in the Magnuson Act and have had a working group working on that for a couple years.

And now that we've gotten the annual catch limit guidelines done, we've turned back to that. And that working group is looking again at what provisions in the Magnuson Act do we need to have formal guidance on.

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We've got a process internally in place that will take us into the summer where we'll decide whether we need to have a proposed rule. So expect something mid-to-late summer on that.

The one issue here on the LAP Program is the new administration is keen on implementing what they've been terming "catchshare programs." So we've fallen back a little bit internally to try and figure out what are catch-shares.

There is no regulatory definition of a catch-share program, or statutory definition. So we're working to define what a catch-share program is and then figure out how we circle all those in a corral, and what do we do with them, and what our new goal will be?

So we're working with the new administration folks. Dr. Lubchenco is very interested in catch-share programs. And our next action here may be to develop a goal

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similar to double the number of LAPs. But what's our for catch-share programs? goal Should it be an economically-based 3 qoal? Should it be just a number-of-programs goal? Should the goal be to end overfishing using catch shares? What's our goal associated with catch shares? So we'll be working on that in the near future.

A couple other rulemakings that we've been working on: the Experimental Fishing Permit, the EFP Program. Again, the Act required us to streamline that program.

We've issued a proposed rule on that. We've taken comments, and we're getting close to getting the final rule out on that. Some of the issues associated with it were simply that scientific research under the Act doesn't require an EFP.

So we're looking in this rule to clarify what scientific research, to make it clear to applicants when they needs and when they don't.

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Another distinction we've been trying to make is the difference between conservation engineering and gear testing.

Again, I think if we clarify the definition of "scientific research," that will help us with conservation engineering occurs as a research activity. Gear testing occurs as a fishing activity.

A couple other items there were timely issuance of the EFP. The Act required us to streamline. In looking at that we may not be able to issue those permits any quicker, again, because of ESA, MMPA, and NEPA requirements. So we're trying to outline that a little better in that EFP rule.

A second rule here is the IFP Referenda Guidelines. We have final -- published final rules on that. The Act requires that the Northeast and the Gulf of Mexico LAP programs need to have a referendum conducted with the fishermen before those can go forward. And we have final guidance out on

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those now.

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Another major thing that's occurred since last meeting is related our to international provisions. We've issued proposed rule for developing procedures to address IUU fishing and bycatch. That was published this January. Comments are closing the 14th, which is probably sometime in the next week, because I'm not sure what today is. What is today?

MS. SPEAKER: The 11th -- the 12th.

MR. RISENHOOVER: Thursday. Thank you. That was helpful. Well, you know, Thursday didn't help. Okay.

So if you've got comments on that, get it in. I don't know that we're getting that 150,000 comments. There are also a number of public hearings that were held on that. But that's how we're going to -- the procedures for certification under the Act.

Another big thing that happened was the publication of this Biannual Report to

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Congress, which did identify six countries as having some IUU problems. So we're working through the diplomatic channels with those six countries and the Regional Fishery Management Organization to try to take care of the problems that those Councils -- those countries were identified for.

Now identification is the first step in the process. The second one would be certification of those countries as having IUU problems which can lead to some other problems from the Magnuson Act in trade restrictions. So right now they've just been identified. Certification will happen after we get this final rule completed. So that's down the line a little bit.

Real quick on deep-sea corals. The Act has some new provisions in there on protecting deep-sea coral communities. We have a Draft Strategic Plan out for comment until January 17th. So the folks in the Habitat Office are looking at those comments

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and trying to finalize that, that strategic plan.

Another rulemaking underway, about to go underway, or get underway, guess, is revisions to the National Standard 2 Guideline. That's the best available science quidelines. We had an ANPR on that. We took comments. And we have a working group going through those comments. Heidi is on that. saw her working on it earlier today. think progress is being made. And a proposed rule on that will probably be out fairly soon. that The background to is there was National Research Council Study that recommended changes some that we've implemented, but we haven't really formalized those changes in regulations.

The 2007 Magnuson Act reauthorization had some more provisions in it regarding peer review and what the SSTs are responsible for, and so they're going forward.

Some of the issues there would be,

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know, what's the standard for best scientific information available? Is that something we want in regulations? 3 Who's responsible for the SAFE reports, us or the Councils? And how do you integrate what the 5 SSCs, the Statistical Science and Statistical Committee, to the Council put in those SAFE reports or is an entirely NMFS? 8

And then also there were some new conflict-of-interest standards in the Act. Is that something we want to address under this proposed rulemaking? So look for that in the summer as well. And I haven't been to Mexico.

last thing is But the on the disaster rule. I didn't put a slide in it, but I thought I'd mention it, as well. intent there is to clarify some of the terms in there that haven't been defined in the past in a regulatory action, such as commercial fishery failure, fishery resource disasters. And some of the criteria that we talked about a little bit with Church here, about how do

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you decide when those have occurred? something that's predictable? Is it something that wasn't predictable? And how do we handle 3 these fairly and equitably around the country? So we've proposed in there a threeprong test that there needs to be -- to get the disaster declaration, which makes eligible for funding, although Congress seems to fund folks whether we have a disaster 10 declaration or not in many cases, there needs to be a fisheries resource disaster. to be from natural or undetermined causes. **1**3 cannot be from overfishing. And it has to result in a commercial fishery failure. is, revenues have to decline because of it. 16 The rule proposed an 80-percent threshold for the kind of the sure thing. That is, if your 117 18 revenues go down by 80 percent, compared to the last five years, you get a fast track. Anywhere between 35 and 79 percent is more of We'll look at it, look for a slow track. additional information and see if a disaster

1	occurred. And then finally, anything under a
2	35-percent reduction in revenue doesn't
3	qualify for a disaster.
4	So that's a quick overview of those
5	and Magnuson Act stuff. If you want more
6	information, then I always point folks to the
7	website where we try to keep a table and all
8	the associated information as we go forward.
9	CHAIRMAN BILLY: We're running a
0	little behind schedule, but maybe a couple
1	quick questions or comments.
2	Yes, Heather?
3	MS. McCARTHY: Thank you, Mr.
4	Chairman.
5	Alan, you've talked about the LAP
6	guidelines that exist now. And you're trying
7	to determine whether you need to go further
8	with that. And when did you say you were
9	going to decide that?
0	MR. RISENHOOVER: Well, just
1	again, just to separate the two documents out
2	there, the technical memo that's out there

The guidelines we're thinking about are, are there regulatory definitions or clarifications we need to make that the Agency would either give, you know, kind of the thumbs-up, or a thumbs-down on the rule, if they did or didn't do anything. But the working group's working now, and I think we should have something in the next month to the leadership folks on what would be in that proposed rule, if there is a proposed rule, kind of mid-to-late summer.

MS. McCARTHY: And who's in the working group?

MR. RISENHOOVER: We've got folks from Headquarters obviously and a few regional folks are working with this to kind of draft out a series of papers on what we think there may need to be in those guidelines. And then we've shared those with the regional offices to give us their feedback. So it's an internal work group right now.

MS. McCARTHY: Okay. So if I may?

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1	Is there anything that's public about any of
2	those internal discussions?
3	MR. RISENHOOVER: Not yet,
4	MS. McCARTHY: Not yet.
5	MR. RISENHOOVER: because we
6	haven't made a decision on what we're going to
7	go forward with. You can look at all the
8	comments we got on the LAP ANPR that's online.
9	MS. McCARTHY: Okay. So until you
0	decide that, and there may or may not be
1	something further, the highest authority for
2	the National Marine Fisheries Service is those
3	documents that are already prepared?
4	MR. RISENHOOVER: But yeah, the
5	highest authority would be, you know, the
6	actual provisions in the Act.
7	MS. McCARTHY: Right.
8	MR. RISENHOOVER: But then the
9	technical memorandum talks about how one might
0	implement those, but it's not we don't use
1	
1	the technical memorandum is kind of a

we would with formal regulations.

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MS. McCARTHY: May I ask one more question? If there's any question about anything having to do with LAPs, where does the legal staff, for example, or the regional staff go to for that -- to that technical document that's already in existence?

MR. RISENHOOVER: They've been going back to the statute. And our attorneys have been talking amongst themselves trying to get some input to us on what they there needs to be more quidance on, because we don't want kind of differing opinions around the country. And, frankly, we're a little behind on getting these out, if were going to get them out.

MR. BILLY: Erika.

MS. FELLER: Thank you. And in terms of doubling the number of programs by 2011 to 16, how many of those are currently underway and how -- maybe I'll just ask that question.

MR. RISENHOOVER: How far along?
They're all underway. We've got the 12 in place now and the councils are at different stages, formal stages, of about five. So we're probably going to end up with about 17.

I'm just not sure if all 17 will be done by 2011.

So actually on this website we have something that talks about the ones that are underway as well, so you can look and see which of the council ones. So for the West Coast, the TIO Program is one of those five I mentioned that underway but are not implemented. We don't count them as being complete until they're implemented, and right now that's one of the ones we think will come online in 2011.

MS. FELLER: Do you -- I'm sorry, one more -- do you anticipate that any of the councils will initiate a LAP process for any fisheries beyond those that are currently underway?

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MR. RISENHOOVER: Yeah. Actually we've put together a list where we've talked to the councils and we've talked to regional folks about 'As far as Catch Shares, what do you think the future holds.' think the last number I saw was about 26, total. Now, again, that's just somebody from the council saying, yeah, they think they want The regional director's to work on this. telling us, yeah, this is one that somewhere along the way become one.

So the ones we can count on are those 12 that are implemented and then four or five more that are in different stages of formal work by the councils. Then there's probably four or five more that they're starting to work on. So we're only looking at those 17 as the sure thing, but there's many more kind of in the drawing board for those.

And on the doubling the number, you know it seems kind of funny going from 8 to 16. You know what's the 'So what' in that.

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1	Well, the 'So what' we found is that if you
2	look at the value of fisheries harvested under
3	Catch Share Programs, about a fifth of the
4	current ex-vessel value is harvested under
5	Catch Share Programs.
6	MR. BILLY: Okay. I've got Martin
7	and then Dorothy and then we'll move on.
8	MR. MARTIN FISHER: It's nice to
9	see you again, Alan. Thanks for the humor.
0	MR. RISENHOOVER: I try.
1	MR. MARTIN FISHER: I've got about
2	15 questions and a hundred thousand comments.
3	MR. SIMPSON: A hundred and fifty-
4	three thousand.
5	MR. RISENHOOVER: And people wonder
6	why it takes us time to go through those.
7	MR. BILLY: And you got a chairman
8	that's starting to wry about getting behind.
9	MR. MARTIN FISHER: Okay.
0	MR. RISENHOOVER: So I'll take one
1	question now, Martin. Save the 150,000 for
2	later.

MR. MARTIN FISHER: Those were the comments.

I'm going to go in a different direction than I thought I was going to go. In terms of stock assessments and the Science Center, especially in the Southwest Region, we seem to be having a problem with consistency. We're running hot and cold -- either red grouper's never been overfished, but then two years later and а reassessment, it Now with pink shrimp it was and overfished. now it's not.

Has there been any discussion of privatizing the scientific department of NOAA so that we get sort of this idea of being in this incestuous relationship between the RAs and the Regional Science Centers and the kind of information that goes back and forth? And I was thinking that if we could privatize the science effort, it would bring a lot more confidence to the public sector and it would also create a different kind of response time.

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MR. RISENHOOVER: Right. What there is, is the Science Center's report, there are two lines in the regions. So the regions report to Sam, the Science Centers report to Steve Murawski. So -- no, I'm not going to say it that way. So some of those relationships don't occur like some folks may think at the regional, you know, smaller or regional level.

As far as privatizing the Science Centers, I haven't heard of anything along those lines, but what they have done is with the peer-review process tried to bring in external experts to review the science so it's not just internal NMFS coming up with the --

MR. MARTIN FISHER: No, I've been to see ours and I've watched that happen. But one of the problems that we have is like, for instance in the LAPP program with grouper, or what's going to be called the IFQ, initial allocation is going to be based on what are mandatory but what are self-serving log book

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reports that the fishermen fill out. No
checks and balances. It's riff with errors.

Not to say that it's anybody's fault, but in
digital scanning even a speck of dust creates
zeroes where zeroes don't belong. And there
are fishermen that are going to be allocated
100,000 pounds of fish they've never even
caught. And we're not just talking about one
or two cases. We're talking about several.

And it just concerns me that some of our best available data and our science centers are dealing with antiquated data-collection systems that are really affecting the future of our fisheries and the health of our stocks.

MR. RISENHOOVER: Well, and just to kind of prelude Sam's budget presentation here, we do have requests for improving our stock assessments. We have requests for improving our monitoring. But, again, I don't know the specifics of the grouper IFQ and what some of the problems are, but I'm sure it's a

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very involved allocation process there, hopefully with some checks and balances in it and appeals.

MR. MARTIN FISHER: And one more thing. Has there been any consideration for fisheries that are going to be managed under ACLs that don't have the budget for annual stock assessments? For instance, many of the LAPP programs up in the northwest, in Alaska do very well with ACLs because they have enough money for annual stock assessments. And in our region we're on a five-year cycle, so ACLs don't really make a lot of sense.

MR. RISENHOOVER: Right. Well, the law is clear that you have to have an annual catch limit in place. The science side of that, yes, it would be nice to have an annual stock assessment to go with that annual catch limit. If you don't have those annual stock assessments, and we are tracking these, you know if we have an ACL in place in 2010 when is the next stock assessment in the cycle.

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But what we would like to have is they have designed these ACLs or some indicators in there, and that's usually: Did you stay below 3 your annual catch limit. That sometimes takes a year or two to get the data, but that will 5 be the first indication. If you're below your ACL, that's a good indication that you're doing the right thing. 8 Then the will assessment prove that you 10 overfishing later. But data is a big issue on these as well.

MR. MARTIN FISHER: Thanks.

MR. CATES: Okay. Dorothy.

MS. LOWMAN: So back to the LAPP. So, Alan, we have your working group and you're looking at things that might need some additional guidance and could be part of a proposed rule. And that we might look at the end of summer for a potential proposed rule coming out.

Would at that time be here are the issues and here's the guidance or would there

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also be opportunities if you were commenting to say here are some issues that we should have some guidance, or what is it, what level 3 is that? MR. RISENHOOVER: Right. We did already ask the public for comments on the LAPP provisions. MS. LOWMAN: Right. 8 MR. RISENHOOVER: So we have, that 10 was about 2700 comments resolved, --MS. LOWMAN: Right. MR. RISENHOOVER: -- so we do have that input into this working group as well as the relationships with our regional folks saying, you know: Now that we've had a year 16 or so to look at those provisions, where do

So we're taking those early public comments, we're taking the experience of the work group, we'll come out with a proposed rule that says: Here are the issues, here is our proposed solutions. But, again, I don't

you see the problems being.

1	think that would preclude from somebody from
2	saying, 'There's one issue you completely
3	missed.' Hopefully we captured all the issues
4	in that early round of comments.
5	MS. LOWMAN: Yeah. I mean I think
6	that in the last couple years we've had a lot
7	of on-the-grounds opportunities for these
8	issues to really arise. And I think in
9	particularly and I guess I'm also hearing that
0	you are touching base with the General Council
1	folks in doing this, because
2	MR. RISENHOOVER: The work group
3	has a General Council member on it.
4	MS. LOWMAN: Okay. Good.
5	MR. BILLY: Okay. Alan, are you
6	going to be around for the coffee break and
7	later for people who have other questions?
8	MR. RISENHOOVER: Absolutely.
9	MR. CATES: Okay. Thanks.
0	Sam, the floor is yours. The
1	budget update and the legislative agenda.
2	MR. RAUCH: In five minutes, so

we're going to do good.

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MR. BILLY: We'll give you ten.

MR. RAUCH: Ten, oh, even better.

Alright. I'm not a budget person. Gary

Reisner was going to give this presentation,

but since the 2010 budget came out last

Thursday, he has to be back in D.C. to help

with that roll out and couldn't be here, so

I'm going to try to step in. But if you have

10 detailed questions I won't be able to answer.

This presentation's in two parts.

One is a brief overview of the NOAA budget as a whole, which I'm going to skim through, and the other one is more detailed about the NMFS budget, which I'll pay more attention to. So I'm going, in the interests of time, skip over some of these slides. This presentation will be up on the website, but since Gary didn't give it to me till last night after close of business, we couldn't make it.

Before we talk about the budgets themselves, we got in the Stimulus Package the

America Reinvestment and Recovery Act -- or I forget what they all stand for -- NOAA got 830 million total: 230 million for habitat restoration, vessel maintenance and other things; and then 430 million for facilities, ships, satellite develop; and 170 million in climate modeling.

Congress approved the spend plan on May 7th. Of that there's 167 million to NMFS for marine and coastal habitat restoration. We've been running a process, we ran a publicapplication process. Those, we had over \$4 billion in requests for that 160 million in terms of funds. We hope to make a decision on that by, I think, June 1st, so that people can get the grants in. But there has been a lot of interest, and there are a lot of good funds in there if we can fund even a portion of that, and that's all we would be able to do.

There's also money in there for the Pacific Regional Center in Hawaii and for the Southwest Fisheries Science Center.

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For NOAA, the 2010 budget, NOAA's requesting about four and a half billion dollars, an increase of about 2.5 percent over the Enacted 2009. The biggest part of that -so this is the budget trends, which you can see that for NOAA as a whole traditionally Congress has appropriated mostly in earmarks more than NOAA's requested. This year NOAA is requesting more than Congress has ever appropriated. Most of that is coming from a satellite request, which we'll talk about.

We break our budget down into two main lines: The Operation Funds, the ORF funds and the Acquisition Funds. And so this just describes the changes in general about where we're asking for the increase.

This is the highlights of what Line Office is getting an increase. You'll see that the satellite line is getting the biggest increase from the Enacted, about \$300 million for some new satellites. Fisheries is getting a significant increase. There are also some

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reductions in there, which we'll talk about.

And then those are the other ones. Oceans and

Coast are taking a cut, a hit. And Program

Support's taking a hit in order to pay for

that. And these are net numbers, so there are

pluses and minuses in all of those. All

right, that was the NOAA budget.

This is the NMFS trend, so you can see that in general we're requesting more. We're going to be requesting a significant The Enacted has been flat. The two increase. highest in 2007 2009 ones and actually represent Katrina funds and other disaster In 2007 it was Katrina funds. And in funds. 2009 it was disaster funds, which actually pumped up our budget more than in general the flat line that you see.

These are the accomplishments that we do, which we don't need to talk about that. So the budget is \$879 million for NMFS, which is an increase of \$50 million over the Enacted from '08. This is actually what we got in

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1	'09. So this past month we received our '09
2	budget and we're asking for the '10 budget.
3	So the '09 budget was an increase
4	of six percent, which is going to deal with
5	some labor adjustments, some facility issues,
6	other things including some recovery efforts.
7	It does include aquaculture money, some
8	additional Magnuson money, and some habitat-
9	restoration money. But other than that I'm
0	not going to talk about what we're spending
1	the '09 money on. I'm talking about what
2	we're asking for in '10, because I don't have
3	any slides on what we're spending the '09
4	money on and I don't know anything more about
5	it than that.
6	(Laughter.)
7	MR. RAUCH: I do, but I don't have
8	any
9	MR. WALLACE: I'm glad I came all
0	this way.
1	(Laughter.)
2	MR. RAUCH: What we're asking for

in '10 is another increase of \$911 million.

Most of this is for Magnuson Act increases in

funding. There is also a change dealing with

the Pacific Coast Salmon Recovery Fund, which

is up in the air, and I'll talk about that in

a minute.

Here are the lines that you can see where most of the increases are coming from. is increase in marine mammals. There an That's the species grants. The increase -- and that's not -- the Protected Species increase of 68 million is not a true increase. I'll explain that. The biggest true increase is in the Magnuson Act in terms of the Magnuson Act Fisheries Research and the Observers. Those are the actual increases, which is just a bigger blow-up of the chart that I just showed you.

Protected Species highlights. So what this is, is we've got some additional employees that will help us with the Native Species Act consultations. We've taken the

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Pacific Coast Salmon Recovery Fund and zeroed out that fund and instead created a national fund called the Species Recovery Grant Fund.

And that is supposed to account for both things that you would traditionally give in the Pacific Coast Salmon Recovery money and other money around the country.

This is officially under review by the administration because of concerns about the zeroing out of the dedicated funds for Pacific Coast Salmon. And so it remains to be seen whether or not this budget, although it's rolled out, will continue to advocate for the zeroing out of the Pacific Coast Salmon Recovery Fund and instead having a more generic fund. But for now this is what is in the budget.

There's also money for Marine
Mammal Conservation and Recovery, including
the formation of a Take Reduction Team in
Hawaii and some Monk Seal money, there's some
Atlantic Salmon money and there's some

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additional Pacific Salmon money.

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In Fisheries, the biggest increase is for, as I said, the Magnuson-Stevens Act implementation, including -- there's another slide specifically on that which we'll talk about in a minute. But there's also money for Marine Monuments. This is the new -- not the Hawaii -- but the Pacific, the three Pacific Monuments that Bush declared. This is for NOAA's participation in that.

There are some research funds for CAMEO, which is a Comparison of Ecosystem organization. There are funds, not as much as they think they need, but a down-payment on the Pacific Salmon Treaty that was recently renegotiated. And there are some Ecosystem Assessment Funds to go for California Current Monitoring.

Here are the Magnuson Act increases, so there's a total of \$98 million to fund the new requirements of the Magnuson-Stevens. There will be an additional

\$12 million for Catch Limits, \$9 million for 2 Stock Assessments, \$4 million will go to the 3 Council, about \$5 will go to the Recreational 4 portion of Fisheries Information, 3 million if 5 IUU, and 3 million for Social Science 6 Research.

There's \$12 million in new money that we're requesting for Enforcement, both for Enforcement Agencies and for Observer Programs that go into increase Observer coverage in three Fisheries and add some new Observer coverage in three other Fisheries. And then \$1 million for Habitat for Deep Coral, in terms of an increase.

Some other things that we're asking for: \$2 million for Aquaculture, 1.2 for Climate Change, 1.5 for Ocean Acidification, 6 million for Cooperative Research. And that's it.

And that's not me. So if you have questions on that, let me pause briefly for questions on the budget. I know I went

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-	through that quickly, but we are running short
2	and I'm getting kicked under the table here
3	not really. But questions?
Ŀ	MR. BILLY: Questions, yes. Jim.
5	VICE CHAIR BALSIGER: The number
5	that you had up there on no.
7	(Laughter.)
}	VICE CHAIR BALSIGER: This isn't
)	really a question, and you said this, but
)	those numbers were generally increases, so you
_	can't tell from these slides what the status
2	of those programs are, that showed the change
3	from the last program to the current change.
Ŀ	MR. RAUCH: That's correct.
5	VICE CHAIR BALSIGER: That 2
5	million for Aquaculture, that doesn't mean
7	we've only got 1 million in Aquaculture?
3	MR. RAUCH: That's right. That is
)	the change from the base for Aquaculture. I
)	don't have the complete total budget which
-	would show
2	VICE CHAIR BALSIGER: And you did

1	say that.
2	MS. LOWMAN: So, Sam, you may not
3	be able to answer this question, but in some
4	other documents that have come out there was
5	something about there being like \$18.6 million
6	for Catch Shares, and which I guess are pieces
7	of all of them. And I don't know, again, it
8	that's an increase or the total sort of Catch
9	Shares related budget part, but the other
.0	thing I heard about that is it's all going to
.1	New England. And
.2	MR. RAUCH: Okay. So let me first
.3	answer the first part. So there is \$12
.4	million in new money in the budget, in next
.5	year's budget for Annual Catch Limits. There

MS. LOWMAN: Catch Shares, LAPPs. It's not really on --

MR. RAUCH: Alan.

is -- where is the Catch Shares, the LAPPS.

MR. RISENHOOVER: Yeah. And we've been trying to track the 18 million all morning.

MS. LOWMAN: Yeah. MR. RISENHOOVER: And it finally just hit few minutes а ago. It's combination of funding for New England going primarily for Catch Shares. So it's about 5.6 million directly to our region for Catch Shares. There's some Enforcement there's some Cooperative Research money, and I think there's some Observer money. So it's kind of a crosscut of some of the things that Sam presented. Right. MS. LOWMAN: That's --MR. RAUCH: And it's not all new money, because we have a standing pool of money that's in the recurring budget Limited Access Programs --MS. LOWMAN: Right. MR. RAUCH: -- that can be used and is used to develop these programs, that is our idea. MS. LOWMAN: Right.

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MR. RAUCH: So as new programs come

1	online we can take money out of that. Some of
2	that is a reallocation of
3	MS. LOWMAN: I guess the concern
4	obviously that I have on the West Coast, at
5	the year that we have to get all the
6	infrastructure up hopefully for an
7	implementation of 2011, is it's not clear what
8	the budget is of that work and it's sort of
9	so it's scary to see there seems to be some
0	Catch Share money, which is a significant
1	amount, but I can't find any money, what the
2	budget is for implementation for the West
3	Coast one.
4	MR. RAUCH: Well, so to the extent
5	that the I mean the West Coast is dealing
6	with the Troll ITQ TIQ.
7	MS. LOWMAN: Yeah.
8	MR. RAUCH: And has gotter
9	significant funds
0	MS. LOWMAN: Yeah.
1	MR. RAUCH: separate and apart
2	to help develop that. So that should be

developed with existing funds right now.

To the extent that they're dealing with Catch Limits, how are you going to actually implement that part of it, there is some money for that.

MR. RISENHOOVER: Right. And if they chose to implement their Catch Limits with Catch Share Programs, there's this additional 4 million for the councils to collect.

MR. BILLY: Martin.

MR. MARTIN FISHER: Sam, thanks for being here. Of the \$9.9 does that span the Stock Assessments, do you happen to know what regions that money is going to?

MR. RAUCH: It's going to a number of different regions. Let's see, I don't think I know what specifically they are. I mean we do have breakdowns of how all of this is supposed to be --

MR. MARTIN FISHER: Gary has that?

MR. RAUCH: He does.

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1	MR. MARTIN FISHER: Okay. I'll
2	just call him.
3	MR. RAUCH: I don't have that.
4	MR. SIMPSON: Is that going to be
5	posted, Sam, on the website?
6	MR. RAUCH: I don't know. It might
7	be.
8	VICE CHAIR BALSIGER: I'm not
9	suggesting you pull out the Blue Book. That
0	would suggest its public.
1	MR. RAUCH: Perhaps. I did not
2	read the whole thing.
3	MR. SIMPSON: If it's in the Blue
4	Book it would be on the website.
5	VICE CHAIR BALSIGER: No, it's not
6	in the Blue Book. The details aren't in the
7	Blue Book.
8	MR. RAUCH: Yeah. So I mean what
9	we know, that I don't know. I don't have that
0	kind of detail. There are very detailed
1	tables that I didn't bring.
2	VICE CHAIR BALSIGER: Of course one

problems is this is a President's the Proposed Budget and we don't know whether we'll ever have these funds or not. 3 And so I'm not certain whether Steve Murawski and the Science Board, which consists of Steve and all the Science Center directors, they've talked about where such an increase in Assessments, how it might be distributed. don't know that they'll actually pull the 10 trigger and make that decision until they find 11 how much money we've got.

And so, in philosophy and general principle, we can talk about those issues and we know in particular in the Southeast with these five-year cycles, as you mentioned, we've talked a lot about that and we're trying to get a handle on that. So if you wanted to talk to Murawski he could tell you what we're thinking about. But until we have the money we probably won't be able to say we're giving this much here and there.

MR. RANDY FISHER: But that always

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brings up an interesting question because, as you know, many of us around this room would love to help you get more money. But it's always been a problem that we can never figure out where it's going.

You're going to have a boatload of money left over in 2009, probably, because you have been under some sort of spending cap. So we know that. But we don't know the details of any of this. And I would hope at some point you could tell us what it was so we could help you, and that's always been a problem.

MR. SIMPSON: One other comment.

MR. BILLY: Larry.

MR. SIMPSON: A good comment. It was a thing that came out that the administration or the president was going to make some cuts. And if we're going to cut so many, I don't know how many, I can't remember the numbers, earmarks. Well, I looked through all those earmarks and I didn't see any of

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1	them that were at least in NMFS. So that's a
2	good thing.
3	MR. RAUCH: Yeah.
4	MR. RANDY FISHER: Well, this is a
5	very good thing.
6	MR. RAUCH: In general, this is an
7	increase. There are some programs that didn't
8	get increased or that got cut, but this is a
9	net increase and it funds we've gotten a
0	lot of flak for not fully funding the Magnuson
1	Reauthorization. This takes an effort to do
2	that. There will need to be more in future
3	budgets, but there are some controversial
4	cuts.
5	And if we restore the Pacific
6	Salmon Recovery Fund, where is that going to
7	come from?
8	MR. BILLY: Erika.
9	MS. FELLER: I can certainly
0	understand why there's angst over not funding
1	the Pacific Salmon Recovery Fund. But I'm
2	kind of interested in sort of the thought

L	process or what is behind moving that into
2	sort of a Cooperative Endangered Species
3	Funding Program. Like would that be a
1	competitive grants program? What does the
5	Agency sort of hope to accomplish by doing
5	that?
7	MR. RAUCH: Well, I hesitate to
3	defend something that may be soon gone.
9	MS. FELLER: Well, I'm not I'm
)	actually not asking
L	MR. RAUCH: But it would be but
2	it would be competitive. I mean
3	MS. FELLER: I just want to
1	understand. I actually think it's
5	interesting. I mean
5	MR. RAUCH: I mean, the idea is the
7	Pacific Coast Salmon Recovery Fund process is
3	out there and it has worked. So this would
9	actually represent it has always been
)	funded at levels higher than the
L	administration has come in. So the \$60
2	million is actually a higher mark than I

believe the administration has put in for the Pacific Coast Salmon Recovery in the past, lower than what Congress has funded. And so the idea would be to take the Pacific Coast Salmon Recovery Fund and the good things it has done and it is competitive now to some extent -- and to expand that nationally with some excess. there have been some concerns that you dilute 10 the Fund and that some of the Pacific Coast Salmon money is going to get shipped over to other areas. 13 But I think the general thought processes was to take that program and make it available on the same principle since it has 16 worked fairly well, or at least it seems to have a lot of support. MR. BILLY: Okay. Alright. MR. RAUCH: I've got two other things. MR. BILLY: Go ahead.

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MR. RAUCH: I've got the legislative

thing. MR. BILLY: The floor is yours. MR. RAUCH: This won't take long. So I've got the legislative --MS. LOVETT: Do you want me to... MR. RAUCH: You can put it up there if you want. 8 MS. LOVETT: Okay. I'm not going to go --MR. RAUCH: there is this chart, is on the website, which is the Legislation Tracker, which has got all the bills that have NOAA issues on them. 13 not going to through that. I will briefly talk about a few of these bills. You can look through these if you want. Most of these 16 bills are not going to go anywhere. just like in a general Congress, you have a lot of bills, only a few of them will actually see movement. Some that are of concern, the only one that is -- by the way, the only one that

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has passed so far and been signed is the

Public Lands Bill which includes some actions
for Ocean Exploration, Ocean Acidification
Research, the Coastal and Estuarine Land
Conservation Program, and some other things in
there. The Senate version, which is on the
screen, that didn't pass, but the House
version did.

The Aquaculture Bill, which this Committee has been very involved in in the past, was introduced at the president's last Congress. Ιt has not been request reintroduced this year. The president has not requested it to be reintroduced yet. But the Senate continues to work on that bill. The House also is working on that bill and they're taking a somewhat different tack towards it. The in general been Senate has fairly supportive and, as most of you have seen a draft version of the bill that was circulating around in the Senate, the House is looking to increase the environmental requirements in the bill and is very concerned about the Gulf

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Aquaculture Amendment under the Magnuson Act and whether or not that should be allowed to proceed.

I don't know that they will reach agreement. We're working with both of them, and I don't know where the administration will come down on the bill. We're trying to discern that. If they do, then that might have some movement in this Congress, this two-year Congress.

Seafood safety, something we heard about this morning, and there's a group on, there has been a bill in the Senate on seafood safety, mainly to increase NOAA's role in relationship to FDA. It does a few other things.

This morning we looked at a version of the bill which might actually require certain labeling requirements, that you actually have a set list of seafood that you could actually sell, it's got to be on that list. You can't market seafood if it's not on

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one of the recognized lists, to get rid of some of the confusion in what you're buying, to deal with this sort of basa, catfish kind of problem. I don't know where that's going.

We have not seen a comparable bill in the House. And I don't know that -- that bill has not been introduced, so it's not on this list.

a number of IUU bills, Illegal Unregulated Unreported fishing bills, and Share Bills. They're different bills but they're sort of a similar -- on a similar tack. We've seen movement on both of those in both the House and Senate committees. We might actually get one of those bills through Congress. Both of them correct some loopholes of the prior IUU bills and also seek to strengthen the approach to international fishing.

The Coral Reef Bill has passed the House. It is not in the Senate yet -- I think I got that right. I might have got that reversed. It's got a number of protections in

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there for coral reefs. It requires that there be no damage to coral reefs, but there is an exemption for fishing-related impacts.

One bill that's in there that I want to point out because it also feeds into the regulatory update is Congress passed a law that gave the president the ability to review a recent Endangered Species Act bill. You may recall this Committee has а Protected Resources Subcommittee and I approached the Committee several years ago and indicated that the administration was working on revising the whole regulatory approach towards the ESA and that my concern was that there had not been sufficient public process in that.

And, sure enough, at the end of the last administration, over the course of about two months, we pushed through a ESA regulatory reform package that was designed to both reform the regulatory process and also deal with the greenhouse gases: Whether or not you regulate can use the ESA as а tool to

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greenhouse gases, and the rule the last administration passed was that you cannot.

Congress then gave the president, asked the president to review that and said that the president could withdraw that rule without going through any other public process, and the president indeed did that We withdrew the ESA regulation last month. and indicated that we were going to start a much more open and public process to evaluate some of the concerns that are in there. so, if MAFAC wishes to revisit that we could go talk to that subcommittee about that at some other point.

Some other legislation that expect potentially to see movement on: The Management Act Coastal Zone is up for reauthorization. The administration is working on a bill that it would like to but there have been a submit, number It may or may not see movement in movements. this Congress. It's particularly relevant,

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though, when we talk about some of the ocean governance, and particularly governance of the coastal zone that we'll talk about tomorrow.

The CZMA bill is a potential vehicle for some of those changes.

The Sanctuaries Act is also up for reauthorization. It may move or not. This Congress, once again, we're still waiting to see whether we can get an administration bill through on that one.

HR 21, the big Ocean Bill which deals with NOAA, Organic Act, and Ocean Governance is also out there. It was out there last Congress. I don't know whether that's going to move.

And then there are a number of habitat related bills that are out there that are more isolated. One thing we would like to see on that is the fish habitat legislation for the National Fish Habitat Action Plan, which creates a funding mechanism and an organization mechanics. The Fish Habitat

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1	Action Plan is something that exists. It
2	recognizes these large ecosystem-base habitat
3	plans and tries to have them working towards
4	similar standards. We would like to see some
5	legislation on that, but nothing has happened
6	on that one. There is a more minor bill
7	somewhat similar to that which is the Salmon
8	Stronghold Bill that is working on the West
9	Coast.
0	And that is the legislative report,
1	sir.
2	MR. BILLY: Excellent. Well done.
3	Comments? Yeah, Steve.
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MR. JONER: Sam, the Sanctuary Act Reauthorization, is that the bill that went forward back in the fall, the Sanctuary Enhancement Act?

MR. RAUCH: It was a more limited Sanctuary bill which changed some of the boundaries of some of the sanctuaries, but it was not the whole scale reauthorization of the Act that is potentially out there.

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1	MR. JONER: The one that I saw had
2	the troll ban. Is that still
3	MR. RAUCH: I think that was the
4	more limited one that focused on the sanctuary
5	boundaries and some other things.
6	MS. DOERR: There was a more
7	overall reauthorization of the Sanctuaries
8	Program bill introduced last Congress and
9	there's a hearing on it again.
0	MR. RAUCH: Right, but it did not
1	
2	MS. DOERR: It did not.
3	MR. RAUCH: Yeah, but the sanctuary
4	boundary one, I think it passed.
5	MS. DOERR: Okay.
6	MR. BILLY: Steve.
7	MR. JONER: Where's our legislative
8	fix on the Pacific Salmon Treaty; is that ever
9	going to happen?
0	MR. RAUCH: It is in part I
1	think they've tried to attach that to some of
2	the IUU bills that are out there. Congress

1	knows about the need to make that change. And
2	if any of the ones from the Commerce Committee
3	that we actually deal with, or the House
4	Committee, seem to be moving. I think the
5	idea is that they would append it to one of
6	those.
7	MR. BILLY: Okay. Bob.
8	MR. FLETCHER: Has there been any
9	movement on getting the TIGO Convention
0	(phonetic) authorized by Congress?
1	MR. RAUCH: I don't know. I don't
2	think so, at least not this year.
3	MR. FLETCHER: Because it makes the
4	U.S. look pretty bad. We're about the last
5	one.
6	MR. RAUCH: I understand.
7	MR. BILLY: Randy.
8	MR. CATES: Sam, does NOAA have a
9	position on the Gulf of Mexico's desire to
0	move forward with aquaculture?
1	MR. RAUCH: As to whether or not it
2	is legal or not?

MR. CATES: Legal or they should do it. What --MR. RAUCH: Well, --MR. SIMPSON: We submitted it. MR. RAUCH: Right. MR. SIMPSON: It's out of the council's hands. The Gulf Council has MR. RAUCH: 8 given it to us for approval. We have not yet -- the Gulf Council passed it. It has not been formally transmitted to the Secretary for approval yet. We'll have to go out for I think a 90-day -- or a 60-day public comment period on that before we can take a final statement as to whether or not we can do that. 16 So we've not taken a formal position on that, but we supported it in the council process. MR. CATES: Okay, Bill. MR. DEWEY: Sam, I think it was when you talked about the Omnibus Public Land Management Act, you mentioned there was component of that that dealt with ocean

1	acidification.
2	MR. RAUCH: Yes.
3	MR. DEWEY: Could you elaborate on
4	that?
5	MR. RAUCH: Probably not. It's got
6	it incorporates the Federal Ocean
7	Acidification Research and Monitoring Act of
8	2009.
9	MR. DEWEY: So that's where FOARAM
0	landed?
1	MR. RAUCH: Yeah.
2	MR. DEWEY: Okay.
3	MS. DOERR: Just to follow up on
4	the National Fish Habitat Action Plan
5	legislation. That should be introduced in the
6	Senate side in the next few weeks?
7	MR. RAUCH: Right. So that's why
8	we were hopeful that that can go, and I
9	imagine the administrative would be very
0	supportive.
1	MS. DOERR: Yeah, the hope was the
2	end of April, but that didn't

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MR. BILLY: All right. Thank you very much, both of you. We're now scheduled for a break and then the two, the Subcommittee and the Working Group, will meet. The Fisheries Disasters 5 Working Group will meet in this room and the Commerce Subcommittee is next door, through that wall. I wanted to query the Committee to see if there are any major concerns if we run a little past 5:00 to complete the work of those two groups? We don't have to be ready 13 to go to the aquarium till 6:45, so I mean the groups finish whenever they finish, but maybe we might have to go a little over five o'clock, just to let everyone know. One minor objection to my right. MR. SIMPSON: The East Coast time people were ready to go at five o'clock this morning. MR. BILLY: Okay. Mark, do you

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have any other announcements?

DR. HOLLIDAY: Well, this is just the listing of current assignments 3 subcommittees in case people forgot if they're a member of Eric's Working Group or they're Protected Resources. So doing 5 we are simultaneous meetings of those subcommittees, because within three days we couldn't run them sequentially. So sometimes you'll have to 8 make a choice of which subcommittee or work group to go to, but this was the existing chairs -- and now we can't see it.

MS. LOVETT: Yes. I'm sorry.

DR. HOLLIDAY: Yeah. The last column -- second to last is Fisheries Disasters.

And, again, for the new members who haven't met on some of these committees since you've been appointed, so we don't have any information down for you, but by the end of the meeting we'll have this up to date, we'll have the new subcommittee chairpersons, and the membership figured out. So I just wanted

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to remind you of what the different subcommittees were. We discussed this in November, but one of my goals is to make sure that we have homes for people to go and help, where the real heavy lifting gets done in the subcommittees.

MR. BILLY: Obviously everyone's welcome to either.

DR. HOLLIDAY: Right. So Eric's group is meeting in here because we need the projector. We have an afternoon break here, so if you want, grab some fruit or some cookies.

(The MAFAC meeting recessed for the day at 3:43 p.m. to resume May 13, 2009 at 8:30 a.m. The meeting of the Fisheries Disasters Working Group was recorded and transcribed below)

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FISHERIES DISASTERS WORKING GROUP

Tuesday, May 12, 2009

The Fisheries Disasters Working Group of the Marine Fisheries Advisory Committee met in the Colton Rooms I and II at the Monterey Conference Center, One Portola Plaza, Monterey, California 93940, at 3:58 a.m., Eric C. Schwaab, Chair, presiding.

# MEMBERS PRESENT:

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1	BILL DEWEY
	PATTY DOERR
2 3	ERIKA FELLER
4	MARTIN FISHER
5 6	RANDY FISHER
6	CATHERINE L. FOY
7	STEVE JONER
8	DOROTHY LOWMAN
9	HEATHER MCCARTY
	VINCE O'SHEA
0 1 2 3 4	ERIC C. SCHWAAB, CHAIR
2	LARRY SIMPSON
3	DAVID H. WALLACE
5	ALSO PRESENT:
6	
7	JESSICA M. DUTTON
8	CHURCHILL GRIMES
9	SAM RAUCH
0	ALAN RISENHOOVER

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1	P-R-O-C-E-E-D-I-N-G-S
2	FISHERIES DISASTER WORKING GROUP (3:58 p.m.)
3	
4	CHAIRMAN SCHWAAB: Will you help us
5	sort of maneuver through the document on the
6	screen?
7	MS. DUTTON: Sure.
8	CHAIRMAN SCHWAAB: So what we have
9	on the screen is the April 29th draft which
10	Jessica circulated with some changes,
11	right?
12	MS. DUTTON: I'm sorry. I was in
13	the middle of
14	CHAIRMAN SCHWAAB: You circulated
15	the April 29th draft
16	MS. DUTTON: Yes.
17	CHAIRMAN SCHWAAB: to the
18	members of the Work Group?
19	MS. DUTTON: Yes.
20	CHAIRMAN SCHWAAB: And there are
21	additional changes that are highlighted to
22	reflect changes that I made, just to try to

continue to refine some of the language and draw out some of the recommendations, because throughout our work we've really tried to focus on recommendations in some key areas.

For those who are new to the work of the Work Group, or just as a refresher, I think that from the perspective recommendations we have a pretty good set of bookends in the sense that in the area of kind program principles and objectives, reached agreement around couple recommendations that would seek to elicit from applicants a better assessment of pre-disaster conditions and the relationship between their desired post-disaster outcomes and whatever management plans might be in effect.

So, essentially, when you come in for application for disaster moneys, we're going to expect from you, the recommendation would be that you should be expected to provide some kind of an assessment of your circumstances, recognizing that all disasters

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2	just simply want to put the situation back to
3	pre-disaster condition as quickly as possible.
4	In other cases, because of some other
5	management problems, you might not want to put
6	it back 'as-is'. So at the front end you have
7	that.
8	At the bottom end, and, Jessica, if
9	you just kind of scroll quickly to the bottom
10	end,
11	MS. McCARTY: Can I ask you a quick
12	question?
13	CHAIRMAN SCHWAAB: Yes.
14	MS. McCARTY: Did she send out the
15	corrected version?
16	CHAIRMAN SCHWAAB: No.
17	MS. McCARTY: Okay. Because it
18	would be helpful for those of us
19	CHAIRMAN SCHWAAB: What's out
20	there.
21	MS. McCARTY: So we could see it
22	better, because that's really hard to see up
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aren't created equally. In some cases you

1	there. So I recommend that she send it
2	CHAIRMAN SCHWAAB: What's the best
3	way to do that?
4	MS. McCARTY: send it to the
5	MAFAC list that they have.
6	MS. DUTTON: I don't know if I can.
7	I definitely can pass it around on a thumb
8	drive, but I'm not sure if I have
9	MR. MARTIN FISHER: You can't dump
10	it on the MAFAC site?
11	MS. DUTTON: We've been doing
12	everything remotely, emailing it to D.C. and
13	they've been putting it on the site for us.
14	MR. MARTIN FISHER: Oh, and they're
15	gone.
16	MS. DUTTON: Yeah, they're closed
17	for the day.
18	MR. MARTIN FISHER: Yeah, 7:00 to
19	1:00.
20	MR. DEWEY: Or you could just email
21	it to the MAFAC list.
22	MR. SIMPSON: Gail sent something

out a little while ago. You could still do that and still do a half a page and still see it.

CHAIRMAN SCHWAAB: All right. I'm just going to attach it. I'm going to send it out.

(Pause in the proceedings.)

CHAIRMAN SCHWAAB: I just attached it to one of the things that Bill Dewey sent around and shot it to everything, so let me know if it shows up.

MS. McCARTY: Okay, I will. Thank you.

CHAIRMAN SCHWAAB: So at the bottom end what we did was essentially agreed on kind of some evaluation criteria, sort of at the end of the process. So you sort of had this bookend, you know: Do good job а identifying your proposed outcomes up front and then make a recommendation that should be of post-expenditure some sort evaluation and reporting back, so that we

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would have for the first time I think something that we don't have now, which is any kind of an understanding on a comprehensive basis of what the expenditures of the disaster money have accomplished. With the idea being that that would provide a little more accountability in the process.

And then where it's been sort of a little bit of a struggle, I think, is, and where I think I tried to draw out some recommendations in this latest draft, is sort of in the middle where we talked about a number of implementation issues, a number of allocation -- eligibility, implementation, and allocation criteria.

Did everybody get it?

MR. DEWEY: Yes.

CHAIRMAN SCHWAAB: Not yet?

MS. McCARTY: I'm unattached now for some reason, but great.

MR. DEWEY: I got it.

MR. RANDY FISHER: I got it.

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CHAIRMAN SCHWAAB: I think the only other thing that I picked up from the earlier discussion, particularly around the West Coast Salmon is this idea of, I characterize it as, at what point does it move from basically a disaster to a new norm? Or, alternatively, when you have these kind of cyclical -- you know, if the new norm is a cyclical series of events, then how do you deal with that? And I think that to a large degree that's captured in the economic assessment, I would think, but maybe not. And I'm looking at Sam because I know he's the expert.

MR. RAUCH: Well, yeah, I don't know that it's captured anywhere. I mean we get such differing input on this stuff, so I'm not sure what you guys are planning, but we get such differing inputs into the system that it ranges from very detailed things that talk about the cyclical nature and to just very rudimentary submissions that just say, 'We're losing money this year.'

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So the rule does require -- the proposed rule says you have to compare to the three-year prior average, which is intended to get at least a three-year base line, --

CHAIRMAN SCHWAAB: Right.

MR. RAUCH: -- but not beyond that.

So it doesn't really -- I'm not sure it works

well for salmon which has cycles that are

basically three years and it's hard to capture

that. Does that answer your question?

CHAIRMAN SCHWAAB: I think so.

MR. RAUCH: All right. Good.

CHAIRMAN SCHWAAB: And I guess the only other thing I would just sort of toss on the table -- go ahead, Randy.

MR. MARTIN FISHER: Well, I guess the only thing that continues to sort of bother me, and I've looked at this thing and I agree a lot with what we're doing, but -- and I guess I would direct this to Sam -- I don't think we want to invent something that requires a lot of time for them to be

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reviewing something, because --CHAIRMAN SCHWAAB: You mean a lot of time for NOAA to be reviewing? MR. RANDY FISHER: Yeah, oranybody, because a lot of this stuff, then they're going to have everybody bitching at them that they're not getting the money out. And that's a real balancing act, and I don't know how we do that necessarily. 10 I mean currently the draft says the applicant must do this. Well, I don't even 11 know who the applicant is anymore. 12 13 basically now it's the governors that apply under a disaster. So I guess the applicant 14 would be a governor then. 15 CHAIRMAN SCHWAAB: Well, Ι 16 under the impression from our last call that 17 the applicant is commonly the governors, but 18 19 is not restricted to being the governors. our view 20 MR. RAUCH: In the applicant could also be a mayor. It has to be 21

the executive branch agency that would be

2	can be a local community, but it's going to be
3	the executive branch, whatever that is.
4	CHAIRMAN SCHWAAB: And that would
5	exclude a council or a commission?
6	MR. RAUCH: Well, some counties are
7	run by something or
8	CHAIRMAN SCHWAAB: But I mean a
9	fishery management
10	MR. RAUCH: Exclude fishery
11	management, it would exclude members of
12	Congress, it would exclude private
13	organizations.
14	CHAIRMAN SCHWAAB: Okay.
15	MR. SIMPSON: A commission?
16	CHAIRMAN SCHWAAB: An interstate
17	commission could apply.
18	MR. SIMPSON: You could
19	MR. RAUCH: On the Fisheries Act,
20	not on the Magnuson Act.
21	CHAIRMAN SCHWAAB: Well, the only
22	other thing I was going to say was, which we
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getting the money if we allocate it. So it

talked about on the first call, I think it was a point that Dave Wallace was particularly making was there was this -- this question of whether we were going to as a committee comment on the rulemaking process or whether our responsibility for sort of more broadly defined than the rulemaking process, and I'm not even sure.

I notice that Alan skipped over the status of the -- at the time that we were discussing this, we were -- timing and logistics were going to prevent us from weighing in during the comment period. And I presume that's closed now, but I didn't hear you mention that specifically.

MR. RISENHOOVER: Yes, it is closed.

MR. RAUCH: It is closed, and I think that if you had comments, formal comments -- we're not moving forward yet.

CHAIRMAN SCHWAAB: Yeah.

MR. RAUCH: So I think we could

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accommodate comments. We might have to reopen the comment period. CHAIRMAN SCHWAAB: I think my only -- and we could revisit this, but our concern was that, number one, there was a timing issue and, number two, there was maybe a level of detail that we weren't really focused on at that point, that our issues were more 'big picture' issues. But I wouldn't rule that out 10 if somebody wanted to draft that section. MS. McCARTY: Do both. 11 So I guess I CHAIRMAN SCHWAAB: 12 13 would -- we can walk through this or I can -but before we did I would perhaps throw the 14 floor to additional comments 15 open or questions. 16 MS. DOERR: I have a comment on a 17 specific section, but it can wait. 18 CHAIRMAN SCHWAAB: Okay. 19 No, go ahead. 20 DOERR: In regards to the 21 MS.

eligibility for

section

on

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recreational

fisheries --

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CHAIRMAN SCHWAAB: What page?

MS. DOERR: For the for-hire stuff.

I mean I am not prepared right now, but you
mentioned in here you need to do more
homework. I'm happy to help with that.

We had some of our members that were affected by this statement in the declaration. And so I wasn't involved in that within our office, but I can kind of follow back up with you and have a discussion with regards to which of our industry members were eligible and who weren't.

We have one member who his whole business is manufacturing salmon trolling equipment and he was eligible, so --

CHAIRMAN SCHWAAB: I'm sorry. I didn't hear that last part.

MS. DOERR: His sole purpose was his business was manufacturing salmon trolling equipment.

CHAIRMAN SCHWAAB: Oh, okay.

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MS. DOERR: For the recreational sector, and so he was somehow eligible for the disaster assistance for salmon.

So, like I said, I wasn't intimately involved with helping on that, but I can once I get back to the office talk with my boss and try a little bit more for this homework assignment that you have.

CHAIRMAN SCHWAAB: So we had a lot of discussion, Sam, about this sort universe of eligible players. And there was -- I think Larry made the point that there were ancillary benefits too, for example, the recreational community or some aquaculture that of some of interests grew out disaster-related activities on the Gulf Coast, but that I think it was our understanding that the recreational community as an entity and perhaps even the individual aquaculture operators might not be -- there might be some eligibility issues that we want to recommend be looked at in that regard.

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MR. RAUCH: So I think the statute, at least the Magnuson Act, doesn't -- it says that dock culture and the recreational fishing can't be the basis for the disaster, because it has to be based on a commercial fishery failure. It doesn't -- it's not very clear on who can be eligible. And we have in the past -- usually the eligibility criteria are defined by the congressional legislation. I think we'd like to get away from that kind of approach, and so we are often interpreting not what the Magnuson Act said but what Congress said.

if In our view there was, particularly like the natural resources, I the hurricane kind of disaster, mean recreational fishing and aquaculture clearly are both businesses that can be equally affected by those kind of things. And so there is -- so you could fund those kind of things if you're clear in terms of if money is appropriated, they could be eligible.

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I think those kind of comments would be well received.

CHAIRMAN SCHWAAB: Um-hum.

MR. SIMPSON: And that was my comment. I have no problem --

MR. RAUCH: Right.

MR. SIMPSON: -- with the basis of declaring a disaster being a commercial statistics fishery failure. But after that the implementation of things to help address those problems could very well be and by nature the beast in the Gulf will be some mixture of both recreational and commercial.

I mean when you put out new habitat for artificial reefs you're not just enhancing one segment, the commercial segment, you're enhancing both, and I think you should.

CHAIRMAN SCHWAAB: But I think the nature of our discussion was really focused on direct -- some kind of ineligibility for direct assistance, like a bit aquaculture operator gets wiped out. Well, he doesn't --

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he or she doesn't necessarily want to wait for
ancillary benefits to accrue. There might be
seen direct assistance needed to put that
operation back on its feet. I mean the same
might be true of a community that is heavily
depending upon recreational-fishing related
businesses.
MR. RAUCH: I think that gets back
to sort of the kind of disasters that you laid
out to me before. For natural disasters, it
could happen to everybody. If it's a
commercial if it's a failure of the fishery
CHAIRMAN SCHWAAB: Right. Right,
right, right.
MR. RAUCH: and so the biomass,
aquaculture people may not be affected at all
by that,
CHAIRMAN SCHWAAB: Yeah, yeah.
MR. RAUCH: but they may be well
positioned. But the recreational, dependent

industries, like the charter boat people, they

could be just as badly affected as the commercial people in that kind of situation.

CHAIRMAN SCHWAAB: Right.

MR. SIMPSON: And here's where I'm going, Sam, and why I think that aquaculture should be considered is that we are eventually going to get to a point where some of the bait fisheries that supply recreational and/or commercial are going to be in a tropical hurricane situation, could be wiped And in that instance I think it's out. entirely appropriate that they should considered, not automatically written in. I mean if you've got bait shop operations that supply this segment, I think it's a legit thing, personally.

MR. MARTIN FISHER: Eric?

CHAIRMAN SCHWAAB: Yeah, Martin.

MR. MARTIN FISHER: Couldn't you solve the problem by having different funds, like immediate funds, immediate need funds, and long-term rebuilding funds? And have

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different qualification processes for being able to draw money from each one? CHAIRMAN SCHWAAB: I'm sure you could. I'm not sure --I don't think that's MR. SIMPSON: functionally the way to do it. MR. MARTIN FISHER: Okay. MR. SIMPSON: I think touching on your issue, Martin, is something that I had 10 heard various constituents say, and you heard it when Harlin said we want to be working at 11 speed of industry, not the speed 12 13 government. MR. MARTIN FISHER: Absolutely. 14 MR. SIMPSON: All right. So what 15 he's saying is and he's speaking to, without 16 knowing what he saying, that there needs to be 17 an immediate pot that you can quickly access. 18 mean from the point of declaring 19 disaster to the appropriation of the money was 20 a full year. And then after the appropriation 21

of the money, then you start your process.

1	We've got issues that are going on
2	right now. We're three years into this.
3	MR. MARTIN FISHER: Well, one year
4	is too long. A year is too long for any kind
5	of commercial
6	MR. SIMPSON: But I don't think you
7	want to recommend two different pots. That
8	just causes more confusion, as Randy says.
9	Streamline it. I mean you can handle that
10	issue just as easily in one cooperative
11	agreement as you can in dealing with two
12	cooperative agreements.
13	MR. MARTIN FISHER: No, you're
14	right.
15	CHAIRMAN SCHWAAB: Randy. Heather.
16	MR. RANDY FISHER: So I guess this
17	is a question. The rule then doesn't preclude
18	Congress of appropriating the money any way it
19	wants.
20	MR. RAUCH: Good.
21	MR. RANDY FISHER: And what I want
22	to make sure of is we don't end up painting

ourselves in a box, because however they're going to appropriate at least my experience has been people go back and look at what's in that bill, the money, and say, well, it's for both recreational and commercial.

So irrespective of what we put in a rule or how we operate this thing, it still comes down to how it is written. Is that not the case?

MR. RAUCH: There is that chance that it will do that. At the moment that happens, because we don't have any implementing regulations and we don't have any standards, and so Congress puts their own standards on there.

I think the thought of the National Marine Fisheries Service when we proposed the regulations is if we demonstrate to Congress that we have a program with certain standards, then they will funnel any money through that program instead of having these separate earmarks, because that's what that is. I mean

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the disaster funds are if it's outside of the
process, is it earmarked.
MR. RANDY FISHER: Right.
MR. RAUCH: And so if we have this
process we will have some ability to control.
You can't prevent Congress from doing exactly
what you suggest, if they so desire.
MR. RANDY FISHER: Yeah. I just
want to make sure I understood the
relationship between
MR. RAUCH: Right. Congress
ultimately dictates.
MS. DOERR: So, I'm sorry, just
because I wasn't here. So the purpose of the
because I wasn't here. So the purpose of the
because I wasn't here. So the purpose of the rule is to provide formal and long-standing
because I wasn't here. So the purpose of the rule is to provide formal and long-standing guidance for Congress to funnel money into, so
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because I wasn't here. So the purpose of the rule is to provide formal and long-standing guidance for Congress to funnel money into, so it's kind of to help get rid of the ad hoc disaster assistance bills, to a certain
because I wasn't here. So the purpose of the rule is to provide formal and long-standing guidance for Congress to funnel money into, so it's kind of to help get rid of the ad hoc disaster assistance bills, to a certain extent?

allocate money to a disaster declared pursuant to the statutory authority, at the moment we have no standards in which to say either this is a disaster or it is, how the money should so we would like to create be spent, standards. Because what's happening right now is we're just buffeted by the political winds, so we've got very needy fishermen in real disasters that don't get any funding while other ones, just because of the political winds at the time, will get more than they And so it's very, very difficult for us to deal with. And it's been very difficult for us to have any principles whatsoever --

(Laughter.)

MR. RANDY FISHER: Then we can rise above them, for God's sakes.

CHAIRMAN SCHWAAB: And it goes beyond that initial appropriations and allocation process into the way that the money is utilized. And there is very little -- I mean in some cases -- I mean there's very

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little guidance or control over whether the money is utilized in a way that's going to lead to a better long-term in a lot of cases.

MR. RAUCH: Right. We would very much like to use the money such that the disaster will not reoccur in addition to helping with the short-term economic needs. But there's also, and this is particularly with the salmon, the question is should we be spending this money year after year after year. Maybe it makes sense in some, but it doesn't make sense in some other fisheries. And so that's the kind of question.

And our proposed rule doesn't go into this very much as to what restrictions you would put on how to spend the money, to try to ensure the disaster doesn't reoccur. In what circumstances are direct assistance payments to the fishermen worthwhile and in what situation should you try for other things, like capacity reduction or habitat improvements or other things to try cure the

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problem?

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CHAIRMAN SCHWAAB: Heather.

Okay. Thank you. MS. McCARTY: That was going to be my question, Do you anticipate that the money actually. could be used under that scenario for additional research or something to cure the underlying fisheries problem? Is that what you're talking about or are you talking about strictly management techniques like reducing the effort?

MR. RAUCH: The Magnuson Act says that -- and I don't think it in front of me, but it does say that we can spend the money to ensure that the disaster won't reoccur. It includes -- and it does talk about research to do that, so I think that is a legitimate source of the money, but it's still a vague standard and that's part of what we'd like input on, is how appropriately we should look at that. What should our goals be in such a scenario, assuming there's a pot of money, how

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should we deal with it?

CHAIRMAN SCHWAAB: And I think that the discussion around that point in the Work Group has been to provide -- to recommend providing more sideboards and to recommend that NOAA seek the authority or exercise the authority to essentially require the applicant to sort of articulate their thought process, not to prescribe specific uses of the money, but to say to the applicant, you know: come in with a disaster request, you need to articulate your current conditions and least have thought through how the application of this disaster money is going to lead to some different -- some set of circumstances at the other end that are maybe better than the going if ones that you had in, that's appropriate.

MR. RAUCH: Right.

CHAIRMAN SCHWAAB: And I think just to kind of get back to where this Work Group is, while we didn't go down the road of

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talking about the detail of the rule, I think our set of recommendations would be directed to NOAA and would essentially be saying to NOAA, you know: We, MAFAC as a committee, think that you should again either seek or exercise where it already exists the authority to require these kinds of analyses and this kind of information in a disaster situation.

And I think just the last point of that, while that won't prevent Congress from going outside that system, it's going to, I think, create -- it would make it a little more difficult to do that.

MR. RAUCH: Those are our thoughts.
CHAIRMAN SCHWAAB: Yeah.

MS. McCARTY: Can I give you a scenario and ask you if this is something that you're imagining could be covered by the new rule?

There's been like I think nine years now of disaster declarations in the Bering Sea for a particular species of crab

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that hasn't recovered. And it keeps being rolled Yes, another disaster over. declaration, another disaster declaration. And so what you're imagining then is that instead of doing that, there would sort of be an end to that where you no longer got disaster funding for something that seems to be a permanent condition, number one. there would either be no more funding or there would have to be some sort of plan in the application that indicated what changes might suggest in the management structure and perhaps in the research science area rectify the conditions rather than just keep getting money because there are no crab.

Is that a good example of what you're imagining? Because that's an actual situation in the Bering Sea, was it nine years now they've been getting that? Almost a decade, for example.

CHAIRMAN SCHWAAB: I think the rule as proposed would take care of that.

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1	MR. RAUCH: The rule as proposed
2	would say you don't get roll over, so it would
3	have prevented what we just did in California:
4	You don't get these roll-over determinations.
5	I mean it happened once, you got it. You can
6	it doesn't talk about funding ending. The
7	rule doesn't say your disaster funding ever
8	has to end.
9	I think the theory, though, is at
10	some point it ceases if it's that
11	permanent, it's easy to become a disaster,
12	which has implications of urgency, and you
13	could start planning for it. I mean at some
14	point it shouldn't be disaster funding, but it
15	should be in the normal budget process and you
16	should figure out how you deal with that.
17	MS. McCARTY: I was just trying to
18	understand.
19	MR. SIMPSON: Ours is a five-year
20	broke.
21	MR. RANDY FISHER: Ours is a three.

MR. SIMPSON: We'll spend out five

years or get pretty close and then have nocost extensions, but there's going to be no more money.

MR. RANDY FISHER: It seems to me at our last meeting we had quite a bit of discussion about it and I think this is a valuable thing to do, the more I think about it, and that is there's no doubt in my mind that we're going to have disasters in the future, whatever kind they are. Salmon crashes, crab crashes, tornadoes, hurricanes are going to happen.

So one of the things that we hear a lot about is, well, let's do a buyout, or let's do this or that, or whatever the hell they think of. And one of the things we talked about is it would be smart for us to go back and look at the disasters over a period of time that we've had and figure out what worked and what didn't. Because one of the things that will happen, I guarantee you, is that somebody's going to say, well, I want

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this. You know, like the cash buyout we did, I don't know whether it did any good. I mean it put a helluva a lot of money into the coastal communities, which is good, but did it help people out of their situation? The answer is no.

So we may be wise to look at those that we've had experience with to help us look into the future, to see, to help us structure what some programs could be.

CHAIRMAN SCHWAAB: Well, why don't we just walk through just the recommendations part of this document and we can sort of scroll down through on the screen here as we go. And I guess I would sort of welcome a couple of things. Number one, just in our report on Thursday, I'd like to be able to say here are generally the set of recommendations and focus on the recommendation component of this report, recognizing that -- and as you'll read through this you'll see that there's still, I think, a lot of sort of editorial

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opportunity that remains in the text as well specific language as in the of the recommendations and would invite further editorial comments as we bring this thing to that of document а we can all comfortable with.

But on Thursday it seemed to me it would be most important that we be able to say: Look, here are the recommendations in general that we all agree upon.

Heather.

MS. McCARTY: I have a kind of a comment about the first element, Roman numeral The potential recommendation at the end, I. the that be "Where one seems to new, circumstances dictate different а postdisaster management outcome than pre-disaster conditions of the fishery, the applicant should be requested to articulate postdisaster management conditions and design, and evaluation criteria include measure successful action." That sounds like kind of

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a tall order to me. And it also sounds like almost a direct contradiction of the first paragraph where it says, "In all cases needs to be recognized that disaster funding is not intended as a management tool." seems those things seem to be in two contradiction, because basically you're asking them in this final recommendation to outline a new management scenario practically.

So the question CHAIRMAN SCHWAAB: fishery that's is if you've got a operating according to -- you know, if you've got some management objectives in the fishery that it's overcapitalized say and your management objective is to right size it, now it is hit with a disaster. Do you put it back in an overcapitalized situation or --

MS. McCARTY: I understand.

CHAIRMAN SCHWAAB: -- or do you put it back in the place where the management plan prescribes it to be.

MS. McCARTY: I understand. I'm

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1	just saying
2	CHAIRMAN SCHWAAB: You don't like
3	it?
4	MS. McCARTY: No. It's not even
5	that I don't like it. It's just the
6	CHAIRMAN SCHWAAB: You don't like
7	the way it sounds.
8	MS. McCARTY: The whole section is
9	a little bit contradictory. You should at
10	least take out that sentence that says it's
11	not intended as a management tool, because it
12	clearly is.
13	CHAIRMAN SCHWAAB: No, no. I don't
14	think contradictory.
15	MS. McCARTY: No?
16	CHAIRMAN SCHWAAB: They talk
17	directly about
18	MS. McCARTY: Okay. I'm sorry I
19	missed that meeting probably.
20	MR. SIMPSON: I think what we're
21	getting into in the Committee is discussions
22	of: Okay, we're going to fix management

1	problems
2	MS. McCARTY: Right.
3	MR. SIMPSON: in a disaster
4	declaration. Wrong, wrong.
5	MS. McCARTY: Okay.
6	MR. SIMPSON: Turn around, go the
7	other way. That's what the councils were
8	designed for.
9	MS. McCARTY: Okay.
10	MR. SIMPSON: All right. The
11	disaster declaration is simply to address a
12	disaster, not as a tool or a proxy to get at a
13	management measure that some group has wanted
14	to address. Don't put don't layer that
15	onto this. God's sakes.
16	CHAIRMAN SCHWAAB: But if you have
17	
18	MS. McCARTY: Well, it just kind of
19	sounds like that's what it's doing. I'm
20	sorry.
21	CHAIRMAN SCHWAAB: But if you have
22	no. Think about this. You're at X and you

have a management objective independent of the disaster, if you have a management objective to get to Y, now along comes a disaster. MR. SIMPSON: Don't use it as --CHAIRMAN SCHWAAB: Don't go back to X, use the disaster funding to help you get to Y, where you've already agreed you want to go. MS. McCARTY: Right, I understand I'm just saying I'm hearing sort completely. of a little bit contradiction in the language that --CHAIRMAN SCHWAAB: No, The no. difference is -- the difference is you're at X and there are some people that think it would be nice to go to Y, but it's never agreed upon, and now you have a disaster and suddenly you move things to Y using the disaster even though that's never been agreed-upon an management objective. MR. O'SHEA: So, well, then I guess you could --

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MR. DEWEY: Cathy has a solution.

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MS. FOY: I have a solution. We
can tweak the wording a little bit. At the
beginning of the paragraph where, "However, in
other circumstances there are additional
conditions that could be considered as
fisheries are rebuilt to ensure the results
are complementary to other fishery management
goals."
MR. SIMPSON: There you go. That's
good. Wonderful.
MS. FOY: Take out that
"complementary to" and "results are consistent
with current mandated fishery management
goals." It's mandated, it's law. It's not
something that's anything you have to do.
MS. McCARTY: I got you. I
understand. I'm just saying that last
potential recommendation sounds different
MS. FOY: It does.
MS. McCARTY: than that.
MS. FOY: I agree with Heather that
saying that it's not a management tool is

1	shouldn't even be in there. We don't want to
2	refer to it.
3	CHAIRMAN SCHWAAB: Okay. Well, we
4	could just take that line out.
5	MS. McCARTY: I want to hear what
6	Vince has to say, too.
7	CHAIRMAN SCHWAAB: Go ahead, Vince.
8	MR. O'SHEA: I was just going to
9	say rather than ask Heather to say it for the
10	fourth time that it's broken, why don't we
11	how would you fix it, Heather?
12	MS. McCARTY: Number one, I missed
13	a meeting, so I'm just trying to understand
14	where you're really going. And I'm saying
15	that to a first-time reader of this current
16	version it sounds as though you're saying one
17	thing at the top and another thing at the
18	bottom, so
19	MR. O'SHEA: And they don't want to
20	change the thing at the bottom, so how do you
21	change the thing at the top
22	CHAIRMAN SCHWAAB: So we'll take

1	out the reference to the line that says,
2	MS. McCARTY: Either way is fine
3	with me.
4	CHAIRMAN SCHWAAB: "In all cases
5	it needs to be recognized that disaster
6	funding is not intended as a management tool."
7	MS. McCARTY: Okay. Because since
8	
9	CHAIRMAN SCHWAAB: We'll take that
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11	MS. McCARTY: I didn't attend
12	the second meeting I'm not sure where this
13	group decided they wanted to go. And I'm just
14	saying to a first-time reader it sounds like
15	you're saying two different things. And so
16	whichever it is that you decided, you tell me
17	because I don't know.
18	MR. O'SHEA: Right. And I think
19	Eric's explanation is you don't want to
20	rebuild to an overcapacity condition if the
21	management's plan already decided that you

need to reduce capacity, you want to take that

3	In other words, a management
4	decision had already been made to reduce
5	capacity. I'm not I'm saying that was the
6	thinking behind that idea, but what I'm
7	picking up from you is a language issue
8	between the top and the bottom.
9	MS. McCARTY: Yes.
10	MR. O'SHEA: Yeah.
11	CHAIRMAN SCHWAAB: So we got that
12	fixed.
13	MS. McCARTY: Okay.
14	CHAIRMAN SCHWAAB: So we've got
15	four potential recommendations in that
16	section. How what's the level of comfort
17	with that now?
18	MS. McCARTY: Can I ask you one
19	more question?
20	CHAIRMAN SCHWAAB: Sure.
21	MS. McCARTY: In the final
22	potential recommendation, the one that's in
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-- and that's why they didn't interpret that

as a management tool.

blue on the screen and that's in red on my
screen, "Where circumstances dictate a
different post-disaster management outcome,"
what circumstances are you referring to there?
Just to make it clearer to me and perhaps
CHAIRMAN SCHWAAB: Well, things
like I mean one example is an
overcapitalized fishery. I mean that's not
the only.
MR. SIMPSON: I think she's
referring to two things. Sometimes you just
want to restore back like it was before.
CHAIRMAN SCHWAAB: Yeah.
MR. SIMPSON: Another scenario is
sometimes you want to make a change. I think
that's what it's about.
CHAIRMAN SCHWAAB: Well,
MS. McCARTY: I think obviously a
key point here is if different management
if a different management regime had been
contemplated before the disaster, then you can

go ahead and sort of make that a condition.

If it hasn't been contemplated, you cannot.

Is that what you're saying?

CHAIRMAN SCHWAAB: Yes.

MS. McCARTY: Okay. Why don't you just say that?

MR. SIMPSON: I wouldn't make it a condition. I'd just say: This is to help you do it, and let the states say this is what -- or whoever it is, in my case it's the stats -- this is what we want to do. And that works out between NOAA Fisheries and that Cooperative Agreement, in the Statement of Work. I mean it's approved.

For example, we're going to buy out some gill netters in the State of Alabama. Now there's an agreed-upon need to do it. But the disaster didn't say you're going to reduce the gill netters in Alabama, it's just helping you get that done.

MR. DEWEY: So is it circumstances or is it management plans that you're looking for to dictate the changes?

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1	MS. McCARTY: Yeah. Thank you,
2	Bill.
3	MR. WALLACE: The management
4	objectives were set up to do something
5	MR. DEWEY: So maybe instead of
6	"circumstances" we should say "management
7	objectives."
8	MS. McCARTY: "Where contemplated
9	management objectives," or something like
10	that.
11	MR. SIMPSON: See, I don't want you
12	to get too close back to that using the
13	disaster thing as being a management tool.
14	CHAIRMAN SCHWAAB: Correct.
15	MR. SIMPSON: I want to stay away
16	from that.
17	CHAIRMAN SCHWAAB: I'm going to
18	right now that's the new master copy back
19	there that Jessica has.
20	(Laughter.)
21	MS. DUTTON: Where am I making that
22	change?

CHAIRMAN SCHWAAB: In that last recommendation.

MR. SIMPSON: You're going to play come early. Right?

CHAIRMAN SCHWAAB: And I don't want to -- let me just say, I mean I think we're going to run out of time quick if try to wordsmith everything, so we need to get the major issues on the table.

MS. McCARTY: We can do it or they can do it, right?

CHAIRMAN SCHWAAB: I just...

MR. O'SHEA: Eric, I think one of the things that I'm a little confused now is when we were talking about this, you had just come off of dealing with a disaster in your own state. And I'm not exactly sure where you all were in terms of your management plan knowing that you had to reduce capacity, but I think when we were kicking this around you were acknowledging that that would be a good thing to take into mind when you were handing

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1	out the money. So kind of putting you on the
2	spot here, but it seems to me like this is
3	moving backwards from where you want it to go.
4	MS. McCARTY: Do you want to a
5	buyout; is that what you're looking for
6	MR. O'SHEA: Well, at least
7	somebody wanted to go on
8	CHAIRMAN SCHWAAB: Well, I guess it
9	sort of comes to question, I mean, as to now
10	this language that we've got with respect to
11	sort of a management plan objectives, or
12	something, it sort of becomes a question of
13	whose management plan objectives. And in some
14	cases like the blue crab fishery, some of that
15	was a little bit loose. It was clearly
16	envisioned as a problem at some levels, but
17	there's not a management plan that exists that
18	says explicitly. But I don't think this would
19	create a problem in that circumstance for us.
20	MR. O'SHEA: It gives you the
21	flexibility you needed?

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CHAIRMAN SCHWAAB: Yeah.

MR. O'SHEA: Okay.

CHAIRMAN SCHWAAB: Alright. So the next section, there were a couple of issues, I mean we talked about a lot of different things, but there were a couple of things that sort of came. Again, and I'm not sure that we're -- these eligibility issues, there were a couple of things that had some significant focus in our conference call discussions.

The one we've already talked about, which was -- and maybe the wording here also needs to be changed, but specifically to recommend clarity around eligibility for aquaculture, recreational related economic impacts and for-hire, and that was sort of the general premise that there was a lot of discussion in the Work Group about.

And I presume we still have that, we may just want to say it a little bit differently, or maybe not. Maybe it's fine like it is --

MR. O'SHEA: Well, I mean this was

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just as going to define it, that's all, and get it done before you start down the process, because questions -- your point, Randy, was questions are going to come up.

MR. RANDY FISHER: Oh, yeah.

MR. DEWEY: So, Sam, just so I'm clear, the disaster has to be initiated by a fisheries disaster? So what's lingering in my mind is our problem that we're having in the Pacific Northwest right now with our supply emergency, where our natural sets of failed and hatchery production our availability has failed and it's affected the whole West Coast industry. Something's going on in the ocean that's affected our ability to produce seed, yet it doesn't seem like -unless it's affecting some other fishery, we wouldn't be eligible for assistance under this program.

MR. RAUCH: Well, under the current Magnuson Act, but this Committee could decide that you don't like that answer and could ask

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us to go look for legislative fixes to that kind of stuff.

MR. DEWEY: That was my point when I raised it originally, is if NOAA and MAFAC are trying to encourage aquaculture and increase domestic aquaculture production, we should encourage programs that support that as well as sustainable fisheries and it shouldn't be incumbent on a fisheries disaster for assistance to come to aquaculture.

Right. You know there MR. RAUCH: are movements, and I don't know where it lies right now, to declare aquaculture operations particularly in the southeast to be akin to farms, and so when that happens you have the farm disaster provisions that will kick in. And they did something like that for some of the catfish farms, I think, but that's not clear. But that's out there. That's something this Committee could decide recommend.

CHAIRMAN SCHWAAB: Well, yeah, I

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mean that was clearly where the Committee was in the Work Group discussions, that this was something that we wanted to recommend. I guess the question is are we still there or is there some --

MR. DEWEY: I'm still there.

CHAIRMAN SCHWAAB: Okay. Any objection to us remaining there?

(No hands raised.)

CHAIRMAN SCHWAAB: All right. So this next point, which was something we had some discussion about and I tried to draw it out into a recommendation, just to facilitate discussion, was this idea that there were certain behaviors, high-risk behaviors was the way I think it was characterized, somebody that is underinsured or I can't remember which member of the Work Group brought that up, but that there should be some kind of a risk-assessment component to eligibility so that they aren't simply -- disaster funds aren't used to perpetuate or reestablish in high-risk

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circumstances. And I can't remember who brought that up in the Work Group discussion, but I tried to capture it in the recommendation here just so we could focus on it.

MS. McCARTY: And this is just for

MS. McCARTY: And this is just for those other categories, not for commercial fisheries? This is just for the aquaculture, recreational, and so on? Not for the commercial fisheries; is that...

CHAIRMAN SCHWAAB: I wouldn't say that. I can't remember the comment.

MS. McCARTY: I'm just curious.

CHAIRMAN SCHWAAB: I don't remember who brought it up.

MR. O'SHEA: I thought one was an issue of you can't build a beach house down on the ground anymore, so if you had an ice house or a fish house or something that maybe it needed -- it had to be rebuild not at the wall level but at a higher level, that might have been the example.

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1	MS. McCARTY: This is a tough one,
2	really. I mean I see the need for it, but I
3	can also see
4	MR. SIMPSON: I even see problems
5	with that living where I live. I mean the
6	industry built to Hurricane George and then,
7	by God, Katrina was here. I mean we're going
8	to keep going and it's going to blow over,
9	it's going to be so high.
10	MR. O'SHEA: That's right. I'm
11	just saying that was the discussion I think we
12	had on the phone, the example.
13	MR. SIMPSON: The point is try.
14	Yeah, I mean there's some things like
15	construction of houses with the straps and all
16	that kind of that's good. But I mean you
17	can get and, trust me, I've heard every
18	horror story you can hear, and you can get out
19	of line.
20	MS. McCARTY: The whole risk-
21	assessment process sounds somewhat difficult
22	to me, but I could be wrong. It sounds

impractical, but...

MR. RANDY FISHER: Well, this is just asking the applicant, isn't it, to provide some of that information? Not that I can read it, because I really can't.

CHAIRMAN SCHWAAB: Yeah. I mean perhaps one way to approach this would be to soften this language a little bit.

MS. Ιt McCARTY: says, "By providing eligibility to individuals who have made or have perpetuated high-risk decisions," that's a real subjective kind of thing unless you have some really, you know, hard and fast It's a whole another section rules there. that you'd have to make pretty strong rules or else somebody would just have to make subjective decision on whether it was highrisk behavior or not. I don't know. have any objection to the concept. It just like application seems the the implementation might be difficult.

CHAIRMAN SCHWAAB: Yeah. Well, I

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guess what I would ask Heather is to focus on the recommendation and see if there's a way to get at some analysis of this concern without requiring...

MR. RANDY FISHER: Well, it almost should be under the Principles and Objective part of the thing when the applicant comes in, if that's what this is about, I mean.

MS. McCARTY: Yeah.

MR. RANDY FISHER: I mean the idea being why would we invest money back into something that's going to blow over the next year, or whatever it is, that's a really, really super high risk.

FELLER: So I kind of find MS. myself wondering, I mean what's sort of the recommendations scope of who these are directed at. Are they directed to the Fisheries Disaster Rule? Are they directed at generally? Could NOAA more they be recommendations for what --

CHAIRMAN SCHWAAB: NOAA more

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MS. FELLER: Well, so if that's the case, I mean the question of what constitutes high-risk behavior can be subjective, but in a lot of instances it's not. It's something that's very, very quantitative. You know insurance companies do this, FEMA does this. There have been a lot of instances where people are developing building standards in earthquake-prone zones. There are hard and fast rules.

the question should be So maybe about defining what the high-risk behaviors are and maybe using things like, I don't know, the Coastal Zone Management Act, or telling NOAA to go work with FEMA to try and look at what some of the high-risk issues are for these specific sectors in these fishing communities to what are high-risk say behaviors, what types things should be doing. I mean it's going to take some time probably to develop and implement, but it may be a

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1	worthwhile question to get them working on.
2	MR. O'SHEA: But just because it's
3	difficult to define doesn't mean it's a public
4	policy concept, it isn't, or recommend the
5	Agency ought to look at this.
6	MS. McCARTY: Yeah. No, I have no
7	problem with the concept. I really don't, I
8	just seems like it adds a whole level of
9	complexity to the application and the granting
10	procedures. But I'm sure it can be done
11	quantitatively.
12	MS. FELLER: Like maybe getting
13	MR. RANDY FISHER: Well, we just
14	tell Sam to go do it; what's wrong with that?
15	MS. McCARTY: Yeah.
16	MR. O'SHEA: Fifty million dollars,
17	might have to do some work.
18	MS. FELLER: I guess what I'm
19	suggesting is the recommendation should be
20	more analysis-developing of systems rather
21	than something that's operationalized in
22	disaster declarations and providing people

assistance first. Need to come up with a framework with it first because -- and then with the idea of implementing something. But I think it could be highly subjective if you tried to implement it today.

MS. McCARTY: Yeah.

MR. MARTIN FISHER: Eric, I'm a little confused. At least in our region our regional office is pretty up on top of what is and isn't working in our fisheries and they already know what modalities are outdated or not working, so I don't even think it's so much of a question of asking the fishermen or asking the stakeholders to come up with their self-analysis or even ask the Agency because it's already there. We already know what's antiquated and what needs to be changed.

MR. RAUCH: Some of these disasters happen in federal waters, but a lot of them happen in state waters. And the federal regional office doesn't have a good grasp, and that was the case with blue crabs, is we

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didn't have a good understanding --

MR. MARTIN FISHER: Well, that's true.

MR. RAUCH: -- of how that fishery operated or what would work and what didn't work.

MR. MARTIN FISHER: Well, what about the state wildlife commission or...

MR. RAUCH: We had to rely on that.

CHAIRMAN SCHWAAB: And just to -- I mean just to illustrate sort of I think the range of currently-acceptable responses. We had a blue crab fishery disaster, what, six, seven years ago. An amount of money came in and each crabber got a check for \$500. Now we have a new disaster, an amount of money is coming in, and we've put forth a plan that says we're going to put these guys to work on habitat-restoration projects and research. We're going to use a portion of the money to downsize the fishery, licensed buybacks, et cetera, et cetera. And we're going to do a

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number of things that hopefully are going to put us in a place where seven years from now we're not going to be back asking for another fishery disaster.

And, oh, by the way, these guys would not have approved the disaster declaration except that Barbara Mikulski got money appropriated.

MR. MARTIN FISHER: I see where you're going, I see what you're saying.

CHAIRMAN SCHWAAB: Yeah. so part of this is trying again for us as a committee to make some recommendations to NOAA that, frankly, are designed to help give NOAA the cover that they need to create a better mousetrap, so that they're not constantly at the bottom end of these things saying, 'Yeah, okay, we'll do whatever you tell us to do.'

MS. McCARTY: That's one thing, to get rid of it.

(Laughter.)

CHAIRMAN SCHWAAB: All right.

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1	Well, okay, so what I hear us Heather.
2	MS. McCARTY: I have a
3	recommendation for this particular one on
4	risk. I think if you use it as an eligibility
5	criteria it can't be used it can only be
6	used if they have already known that that's an
7	eligibility criteria and built or done
8	something after that. You can't use it for an
9	initial eligibility criteria. You can use it
10	for a criteria for how you put money into the
11	disaster, period, but not for an eligibility
12	criteria. That's what I think.
13	CHAIRMAN SCHWAAB: Now,
14	alternatively, where I heard the discussion
15	moving before you said that, Heather, was for
16	us to simply make a recommendation to NOAA
17	that they look into this issue and they
18	develop a system for applying
19	MS. McCARTY: In the future.
20	CHAIRMAN SCHWAAB: In the future.
21	MS. McCARTY: Right. You can't use
22	it

1	CHAIRMAN SCHWAAB: Is that equally
2	acceptable to you?
3	MS. McCARTY: That's fine. That's
4	fine. The way it is, it actually it says:
5	If you've done anything that's high risk you
6	can't apply for the disaster money.
7	MS. LOWMAN: Yeah, because you may
8	not have known it was high risk
9	CHAIRMAN SCHWAAB: Okay. So we've
10	agreed we're going to fix that, right?
11	MS. McCARTY: Yeah.
12	CHAIRMAN SCHWAAB: See, Vince, even
13	when we fix the problem she still needs to
14	state it again.
15	MS. McCARTY: Well, some people it
16	just takes a while, you know. I'm not talking
17	about me.
18	MS. FOY: Eric, is she saying that
19	because she needs to reiterate herself, or is
20	she saying that because she just doesn't think
21	you're getting it?
22	MS. McCARTY: That's what I'm

1	thinking. I'm a former school teacher. You
2	say it four times.
3	CHAIRMAN SCHWAAB: Look, I have no
4	pride of authorship here. I welcome
5	alternative authors.
6	MR. RANDY FISHER: It started up
7	here you don't have any pride no.
8	MS. McCARTY: And you also have to
9	be not shy.
10	CHAIRMAN SCHWAAB: All right. So
11	we'll fix that. Can we move onto
12	implementation issues?
13	So this first one, it basically
14	says you're going to spend the money the way
15	you said you were going to spend it.
16	MR. O'SHEA: Eric, on the first
17	paragraph, that last sentence, the fisheries,
18	I'm drawing a blank on that. Is that the
19	Agency?
20	CHAIRMAN SCHWAAB: Well, again, and
21	some of this language is sort of left over
22	from collection of ideas that came out. I

1	mean it might be that we don't need that in
2	the final.
3	MR. O'SHEA: No, I'm just
4	wondering, I don't know what that word means,
5	that's all.
6	CHAIRMAN SCHWAAB: Which one?
7	MR. O'SHEA: "However, it appears
8	fisheries could rebuild and overcapitalize
9	fishery if they want."
10	CHAIRMAN SCHWAAB: Oh. Yeah, I
11	don't know. It's just an editorial.
12	MR. O'SHEA: Might take that
13	sentence out.
14	CHAIRMAN SCHWAAB: Let's take it
15	out.
16	MS. McCARTY: That's a relic.
17	MS. LOWMAN: It doesn't do
18	anything.
19	CHAIRMAN SCHWAAB: We'll just take
	it out.
20	ic ouc.
21	MR. RAUCH: Okay.

1	like sour grapes.
2	CHAIRMAN SCHWAAB: All right. And
3	then the next one is something we had some
4	discussion in the Group about looking at other
5	types of assistance that are available. And
6	there was some discussion of coordinating with
7	other, and I just pulled that out into a
8	recommendation, relating to coordination with
9	other federal or local relief programs.
10	MS. McCARTY: I like the mention of
11	the Exxon <i>Valdez</i> .
12	CHAIRMAN SCHWAAB: I'm sorry?
13	MS. McCARTY: I like the mention of
14	Exxon Valdez. Where did that come from?
15	MS. FOY: I didn't do it, Heather.
16	I don't know.
17	MS. McCARTY: I thought you did
18	that.
19	MS. FOY: I know you thought I did.
20	MR. O'SHEA: Oh, I did. I was the
21	guy that did that.
J	

CHAIRMAN SCHWAAB: Oh, no.

1	MR. O'SHEA: The OPA 90 thing
2	created a revolving fund to respond to oil
3	spills.
4	MR. RANDY FISHER: That's right.
5	MS. McCARTY: A great example.
6	CHAIRMAN SCHWAAB: Okay. So that's
7	the third recommendation, which probably is a
8	pretty big lift, but I think there was a
9	pretty strong feeling that something like that
10	would be desirable.
11	MS. McCARTY: The Standing Disaster
12	Fund.
13	CHAIRMAN SCHWAAB: Yeah.
14	MS. FELLER: Yeah.
15	MS. McCARTY: It works, doesn't it,
16	Vince?
17	MR. SIMPSON: Will it be in very
18	prescribed, tight restrictions on what you can
19	do, but it's already there and it can be done
20	very fast. It won't necessarily do all of it.
21	It will just do part.

MS. McCARTY: It's a great idea.

CHAIRMAN SCHWAAB: And then there was I think a pretty strong opinion that we ought to recommend removal of all matching fund conditions.

MR. RAUCH: In my view that would encourage them to actually use the Magnuson Act process rather than to do the separate appropriations, because that's the main reason

MS. LOWMAN: Oh, because you can't do the --

that they go outside the process, it's because

every time they want -- I don't --

MR. RAUCH: I don't believe that they've ever actually required matching funds.

MR. SIMPSON: They have. I argue against it when they institute it. This goes back to the old 88309 program. The only thing we ever did was oysters back in those days. And there was no matching. And, I don't know, when Virginia Van Sickle was the head of Louisiana Wildlife and Fisheries, whatever year that was, they had an amendment and put

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matching funds into the then Interjursdictional Fisheries Act, and I said, oh, that's the absolute worst time to do it, in a disaster.

But, anyway, and then subsequent to then I think they've taken it back out, so it's kind of in and out, in and out. And then they can do, like you said, they can make an exception. And there's no matching fund.

CHAIRMAN SCHWAAB: Okay.

MR. SIMPSON: But when you're dealing with a state program and you've got \$127 million, that's kind of hard for a state with after a hurricane like come up Katrina. You see what I'm saying? It becomes very problematic, matching funds would. Now we didn't have to do it, but you can see where that would be a very big problem.

CHAIRMAN SCHWAAB: Okay.

Allocation criteria. There were a series of questions raised about what governs the ultimate use of funds. And essentially, again

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sort of harkening back to this, here's the application that says this is what we plan to do, and that becomes the guiding document. Again, and maybe this is redundant, it says spend the funds the way you said they would be spent in the grant application.

And then there was broader discussion about this issue of lump-sum appropriations whether and we need recommendation to NOAA that they develop some system for allocating lump-sum appropriations amongst multiple disaster declarations. don't know what that would look like, but right now it's again something that's driven by political weight, not by the size of the disaster.

MS. McCARTY: We may never be able to tackle that.

CHAIRMAN SCHWAAB: It doesn't say we can't ask them to.

Again, I don't think that we're -the way I view this is what we're saying to

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1	NOAA is: Something needs to be done in a way
2	that gives them the cover to do what they know
3	they need to do but that they can't do on
4	their own.
5	MS. McCARTY: No, it's good. It's
6	good.
7	CHAIRMAN SCHWAAB: All right. Then
8	moving right along to accountability.
9	MR. O'SHEA: So even if
10	CHAIRMAN SCHWAAB: Go ahead.
11	MR. O'SHEA: the senator from
12	Maryland gets all the money but Virginia's the
13	one that gave up all the fishing,
14	CHAIRMAN SCHWAAB: Hypothetically.
15	MR. O'SHEA: it would go to
16	Virginia. That's your plan.
17	(Laughter.)
18	CHAIRMAN SCHWAAB: Not that that
19	would ever happen.
20	MR. JONER: We'll never run out of
21	salmon disasters, so the money will never get
22	there.

1	CHAIRMAN SCHWAAB: Okay. Alright.
2	And then in accountability, there are
3	essentially two recommendations. One deals
4	with an evaluation that should be conducted at
5	the program level, which is essentially asking
6	NOAA to do that. And then a second or perhaps
7	the first level, which is that there be a
8	requirement for some evaluation and report at
9	the disaster level at the end of or, you
10	know.
11	And then there's a last piece in
12	here which I can't remember where it came
13	from, that there be some allocation of some
14	portion of those funds that should be
15	allocated to allow this evaluation to occur.
16	MR. MARTIN FISHER: Don't look at
17	me.
18	CHAIRMAN SCHWAAB: All right. So
19	that's where we are.

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Since it's 5:01.

MS. McCARTY: It's really good.

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CHAIRMAN SCHWAAB: Huh?

MS. McCARTY: It's really good.

CHAIRMAN SCHWAAB: So I think what my goal would be, again to reiterate, that we sort of capture just these recommendations pretty explicitly for the presentation on Thursday. That we recognize there's probably some editorial work that needs to take place in this document.

MR. RAUCH: Can I ask one question,

CHAIRMAN SCHWAAB: Yes.

MR. RAUCH: -- because -- and maybe I missed it because I didn't look at this beforehand. A big political question going on right now with our disaster rule is whether or fund disasters not you can caused by overfishing or the fishing regulations themselves. And I did -- and maybe I missed it, but I didn't see a recommendation on that.

CHAIRMAN SCHWAAB: I think our basic assumption was that you can't now. And

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1	I don't think there was any energy on the
2	Committee to change that.
3	MR. WALLACE: We actually discussed
4	that and there was, I think, a consensus that
5	that's not what a disaster that's not a
6	natural disaster. That's a regulatory
7	function and that's something entirely
8	different.
9	Now if the Agency or Congress want
10	to change that, that's one thing. In the New
11	England groundfish, two weeks ago you came up
12	with \$16 million and called it a disaster fund
13	and just did it.
14	MR. RAUCH: We called it no, we
15	did not call it a disaster fund.
16	MR. WALLACE: Well, okay, whatever
17	you did. But, anyhow, there was it came
18	out of nowhere of course. And I guess it was
19	well received by the recipient.
20	(Laughter.)
21	MR. WALLACE: But I'm like Eric in
22	that I believe that what this Committee is

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trying to do is to come up with a group of criteria that helps you answer these questions when Louisiana says they have a -- the Gulf Coast says they have a disaster, Larry and his folks put in \$10 million, Congress appropriates \$100 million and gives it to NOAA to distribute, and then you need to have some priority on how to do that.

And from my perspective we surely want to avoid as much as possible Congress dictating what happens, but that's never going to happen. They are going to be cut projects for every senator and a lot of powerful congressmen. And so those come down the road, you don't have a lot of choice.

So that's the reason that I think that this is a constructive exercise and recognizing all the restraints from the exterior that gets encompassed in this.

MR. RAUCH: Well, so but on that point about sort of the regulatory causes of a disaster, I mean it's in our proposed rule

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1	that it is not compensable, but
2	MR. MARTIN FISHER: But the MSA
3	says that it is. The MSRA says it is.
4	MR. RAUCH: It is debatable whether
5	it says that it is or not. We have
6	interpreted the MSRA to say that it doesn't
7	because we have found that the MSRA was
8	ambiguous and so we have put that
9	interpretation on it. But if this Committee
10	simply had a view on that, one way or the
11	other, whether it should or not, that would
12	help us in finalizing our view on that.
13	MR. RANDY FISHER: Well, I think
14	MR. RAUCH: I think it is
15	necessarily solidified that it is not
16	compensable.
17	MR. RANDY FISHER: Well, I think
18	our view here was that it shouldn't be paid.
19	MR. RAUCH: Well, that would be a
20	helpful view.
21	CHAIRMAN SCHWAAB: So the thought
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1	essentially cannot create your own disaster
2	through fishery regulation.
3	MR. RAUCH: Or overfishing. I mean
4	it is either
5	CHAIRMAN SCHWAAB: Right, right,
6	right,
7	MR. RAUCH: overfishing or
8	regulation.
9	MR. MARTIN FISHER: There are the
10	doers and being undone too.
11	MR. SIMPSON: Right. And that
12	doesn't mean that the ones that get gored are
13	the ones that ran up to the bull.
14	MR. RANDY FISHER: Well, that's
15	#1 aa
	clear.
16	Clear.  CHAIRMAN SCHWAAB: Is that related
16 17	
	CHAIRMAN SCHWAAB: Is that related
17	CHAIRMAN SCHWAAB: Is that related to that high-risk behavior.
17 18	CHAIRMAN SCHWAAB: Is that related to that high-risk behavior.  (Laughter.)
17 18 19	CHAIRMAN SCHWAAB: Is that related to that high-risk behavior.  (Laughter.)  MR. RANDY FISHER: Is that

think we ought to do it, but there Florida recommendation to declare a disaster because of the turtle interaction with the long-liners. Now the long-liners didn't do that. MR. MARTIN FISHER: The long-liners didn't do that? MR. SIMPSON: Well, I mean didn't -- they didn't -- let me back out of that. don't think that's the situation --(Laughter.) CHAIRMAN SCHWAAB: But that's not necessarily that different from, for example, the West Coast declarations associated with MPAs, right? MS. McCARTY: It was an overfished thing, so --MR. RANDY FISHER: But there hasn't been a declaration resolved in an MPA. I mean a disaster, you may call a disaster in the Hawaiian Islands because of the Monument.

They did that because 26 people lost --

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1	MR. WALLACE: You know that's a
2	very interesting point, Eric, because NOS in
3	theory doesn't create doesn't have any
4	regulatory authority, but if there is an MPA
5	or one of those other sanctuaries created by
6	Congress that could be a no-take zone, that is
7	not a part of NMFS regulatory authority.
8	That's imposed by another agency, another
9	portion of NOAA, and that may then be part
10	CHAIRMAN SCHWAAB: So the
11	recommendation we want to make is specific to
12	overfishing or fishery regulation and
13	basically
14	MR. WALLACE: Based on council
15	CHAIRMAN SCHWAAB: Yeah.
16	MR. WALLACE: council
17	CHAIRMAN SCHWAAB: You can't
18	essentially create
19	MR. WALLACE: Managed fisheries.
20	CHAIRMAN SCHWAAB: your own
21	disaster through overfishing or through a
22	regulatory decision specific to the fishery.

1	MS. McCARTY: Well, that's their
2	position there in New England, it's being
3	overfished, it's an overfished fishery. They
4	don't get disaster money,
5	CHAIRMAN SCHWAAB: Right.
6	MS. McCARTY: is that what
7	you're saying?
8	CHAIRMAN SCHWAAB: Right.
9	MS. McCARTY: Okay.
10	MR. RANDY FISHER: That's what
11	we're saying.
12	MS. McCARTY: Okay.
13	MR. SIMPSON: Is that what you want
14	to say is you agree with the NMFS proposed
15	rule as far as this discussion is concerned.
16	MR. MARTIN FISHER: But that leaves
17	NMFS off the hook, no offense.
18	(Laughter.)
19	MR. MARTIN FISHER: Ultimately
20	MR. RANDY FISHER: Didn't you get
21	the one about the bull?
22	MR. MARTIN FISHER: Ultimately

now hang on, guys. If the good people at the Science good people Center and the administration at NMFS made some decisions on some data that wasn't -- that didn't coincide with the natural world and everything thought there were more fish than there were and all of a sudden the fishery collapsed and all of the while NMFS has been putting out fisheries management that says go ahead fish, fish, and then all of a sudden, boom, the stock collapses and now that is a disaster that the fishermen did not create, because they were complying with the law.

And the culpability is, I'm sorry, in the hands of the government at that point.

And to interpret that little line in the MSRA and say, well, we can wash our hands from this because this doesn't apply, I don't know. It seems like that needs a little further study.

MR. WALLACE: Well, let me muddy that --

MR. MARTIN FISHER: Let's hear from

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Heather.

MR. WALLACE: No, let me muddy that little bit. What about ecological water changes that cause the fisheries disaster with the fishery under management and we haven't probably seen many of those so far. But there's a good chance that at least on the Atlantic Coast we may well see those in the And surely our presentation on near future. salmon today said the nutrient level went down and the currents changed and the water warmed up and the forage fish for the salmon went awry and all the salmon starved to death, the

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MR. SIMPSON: That's a natural, biological disaster.

17 CHAIRMAN SCHWAAB: See, think there's any question that some kind of 18 19 an ecological disaster is eligible. At least

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Okay. Well, then --MR. WALLACE: then you have to separate them between those

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I don't

1	from the regulatory authority and how the
2	fishery is managed. And maybe that's
3	splitting hairs.
4	CHAIRMAN SCHWAAB: Well, I'm not
5	sure it's splitting hairs at all. I think
6	they're pretty different things.
7	MR. SIMPSON: Your example is
8	CHAIRMAN SCHWAAB: I think the
9	question is, going back to Martin's point, so
10	somebody says there's a bunch of fish there
11	and all of a sudden we realize there weren't a
12	bunch of fish there, well, where did the fish
13	go.
14	MR. MARTIN FISHER: And why why
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16	CHAIRMAN SCHWAAB: And is that
17	MR. MARTIN FISHER: did anybody
18	think they were there, to begin with. And
19	we're having that situation develop right now
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21	CHAIRMAN SCHWAAB: And that's not a
22	situation that was created by overfishing or

1	by the fishermen. That's a situation created
2	
3	MR. MARTIN FISHER: By the
4	regulatory process.
5	CHAIRMAN SCHWAAB: No.
6	MR. JONER: Not necessarily.
7	CHAIRMAN SCHWAAB: By bad you
8	know,
9	MS. LOWMAN: It could be
10	MS. FELLER: That's
11	CHAIRMAN SCHWAAB: Martin, one of
12	two things could have happened there. Either
13	there was an error in science or maybe
14	something really did happen, it's just then
15	apparent what happened.
16	MR. MARTIN FISHER: You're right,
17	but in either case the regulatory action is
18	going to put the fishermen out of business and
19	there should be some protection for the
20	fishermen in that scenario.
21	MR. WALLACE: I think that you
22	CHAIRMAN SCHWAAB: I don't think

1	there's any disagreement on that point.
2	MR. WALLACE: would be covered
3	under like the salmon scenario that
4	MR. MARTIN FISHER: Well, if not
5	you redefine that blurb in the MSRA, because
6	it could be the regulatory action that
7	actually puts the fishermen out of business,
8	which becomes the disaster.
9	MR. RAUCH: Recall part of this is
10	not you don't have to for the purposes
11	of this you don't have to accept the MSRA as
12	written. I mean we're interested in your
13	ideas of how it should work.
14	MR. MARTIN FISHER: Okay.
15	MR. RAUCH: And if the answer is to
16	change the definition, then that's a good
17	recommendation and we'll take that under so
18	
19	MR. MARTIN FISHER: Well, I'm not
20	sure there's consensus on the Committee to do
21	that.
22	MR. RAUCH: Well, and I'm not

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trying to force you to decide one way or the
other. But we are interested in your views on
how we have interpreted that, whether that's
the right policy outcome we should have, and
you guys can decide whether that's true or
not, if that's how it will play.
MR. MARTIN FISHER: So does that
create a stumbling point for the document or
the presentation?
CHAIRMAN SCHWAAB: It's just a
question of whether we have a recommendation
on that point or not, and I'm not sure whether
we
MR. SIMPSON: Maybe the Committee
when they address it can decide.
CHAIRMAN SCHWAAB: Well, why don't
we draft
MS. FOY: Couldn't you just solve
it by saying that
CHAIRMAN SCHWAAB: Why don't we put
something in draft and hold it out there for

further discussion?

MS. McCARTY: Yeah, because whole Committee's going to have to discuss it anyway. CHAIRMAN SCHWAAB: Yeah. Okay. Then we could all --MS. McCARTY: CHAIRMAN SCHWAAB: Since half the Committee is ready to leave. MS. McCARTY: They look like it. CHAIRMAN SCHWAAB: Jessica, can you 10 just clean this up? You know eliminate all the track changes and circulate it back to the 11 Work Group? 12 13 MS. DUTTON: Sure. CHAIRMAN SCHWAAB: And then what 14 I'll do is also -- would you also do me a 15 favor and just pull out a version that's just 16 got the list of recommendations? 17 MS. DUTTON: Sure. 18 CHAIRMAN SCHWAAB: And we'll use 19 that to talk from on Thursday. And then we'll 20 probably take a little more time just to kind 21

of tidy this document up.

1	MS. McCARTY: Why don't we keep the
2	track changes for the moment so that people
3	here can see what was changed today?
4	CHAIRMAN SCHWAAB: Will you send it
5	to us both ways?
6	MS. McCARTY: Yeah, both ways is
7	good.
8	MS. DUTTON: This way and a
9	cleaned-up version?
10	CHAIRMAN SCHWAAB: Yeah.
11	MS. DUTTON: Sure.
12	MS. FOY: We already have it this
13	way, right? She emailed us
14	MS. McCARTY: Except she's made
15	additional changes.
16	CHAIRMAN SCHWAAB: She's made a
17	couple.
18	MS. McCARTY: I hope.
19	CHAIRMAN SCHWAAB: All right.
20	Well, I think we're close on
21	MS. McCARTY: Otherwise I'm going
22	to start over.

CHAIRMAN SCHWAAB: I think we're close on some pretty decent recommendations.

Thank you, all.

(The Work Group meeting was adjourned at 5:14 p.m.)

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