

Chapter II: Enhancing Ocean Value and Vitality

- **Marine Mammal Protection**
 - **Essential Fish Habitat**
- **Coral Reef Ecosystem Protection**

15 With that, let me turn to Admiral Gaffney for the
16 next marine mammal report.

17 DISCUSSION OF MARINE MAMMAL PROTECTION

18 ADMIRAL GAFFNEY: We have three more to do in
19 the next, about hour. You should note, Mr. Chairman,
20 that besides the other wonderful things you have heard
21 about the Stewardship Working Group, 100 percent
22 attendance today at this time.

1 CHAIRMAN WATKINS: So noted. Thank you.

2 (Laughter.)

3 CHAIRMAN WATKINS: This is a first, by the

4 way.

5 ADMIRAL GAFFNEY: Not for us.

6 (Laughter.)

7 ADMIRAL GAFFNEY: No, this is normal for us.

8 Our staff is here as well.

9 Marine mammal protection is next. The grammar

10 on the opening sentence is a little bit clumsy. We saw

11 a need for improving the science basis for protecting

12 marine mammals and for improving the permitting process

13 that pertains to marine mammals to ensure effective

14 protection.

15 The way we would do that, we have several
16 recommendations. They are actually on two slides.
17 First, is to increase the awareness of education, so
18 that voluntary actions taken by the American public or
19 the international public is better. That is what we
20 really mean by "stewardship."
21 Secondly, despite complaints people may have
22 made about various things that we do with marine

1 mammals, in fact the United States puts more federal
2 money into research that affects marine mammals, on
3 marine mammal issues, than any other country. Despite
4 the fact that we self-criticize ourselves for doing rude
5 things to marine mammals, our record is better than
6 others in the world.

7 We should take those two positions, and
8 therefore take a strong leadership
9 role, in international bodies that are looking at better
10 protection, more effective protection of marine mammals.

11 We believe, though, even though we are leading
12 the world in research investment, that we can do quite a
13 bit more. Two points on that, it is about \$13 million a
14 year right now that is being spent by the Federal

15 Government on marine mammals research, maybe a little

16 bit more than that but not much more.

17 Unofficially, we think that maybe doubling

18 that is what the traffic will bear as far as number of

19 scientists who are in the field and the number of marine

20 mammals that can be used and other things that

21 constrain. You can't just throw money at this

22 limitlessly, but maybe doubling it would be useful.

1 The principal funders today are the Minerals
2 Management Service and the United States Navy because of
3 naval operations and oil and gas prospecting. We
4 believe that other agencies, those that regulate and
5 enforce and have other interests, should also put money
6 in that is at least in the seven-figure category, not
7 just Minerals Management Service and the Navy.

8 To ensure credibility, we should take any
9 increase and maybe some of the money that is there now
10 and have it managed through, or address research
11 projects that are prioritized by the National Ocean
12 Partnership Program so that the money becomes coalesced
13 and research is fully credible as it can be.

14 The next slide.

15 We believe that the current harassment
16 definition is neither objective or predictable, and it
17 can be improved by continually looking at the
18 information that comes out of this research program.

19 When you get a chance to improve it, you
20 should, not that you will ever be able to improve it
21 once and it will be good forever. However, every few
22 years or so one should gather up the science and see if

1 you can make that definition more predictable, more
2 objective so that there will be better voluntary
3 stewardship.

4 We understand that we endorse the National
5 Research Council words on improving the definition of
6 harassment. This is a much, much shorter version than
7 is in their report, but they refer to "meaningful
8 disruption of biologically significant activities." I
9 believe they modify that further to reflect on
10 reproduction and survival. We thought that NRC
11 definition was a good goal to aim for.

12 Finally, the final I guess structural
13 recommendation is to try to improve the permitting
14 process to make government work a little bit better and

15 more effectively. Therefore, whenever it is possible to
16 issue programmatic versus project permits in the same
17 category, certainly the programmatic programming would
18 be in a very defined scope and not be so wide open that
19 everything would fit in that bin.

20 We should clearly define the scope and then
21 use programmatic permitting, rather than going back to
22 the bureaucracy time after time after time for the same

1 kind of project, and therefore bogging it down to such a
2 point that it can't function.

3 We would use Andy's adaptive management
4 techniques whenever a permit is issued, we would require
5 that the permittee would collect data so as to enhance
6 the understanding of the issue. This may be latitude,
7 longitude and time, the data might be temperature and
8 salinity, wave height, bathymetry or whatever, some
9 people will have greater capability than others, but,
10 nonetheless, data could be collected so that we can get
11 to truth always.

12 If there are programmatic permits issued, they
13 are not for life. They should be reviewed just as new
14 science comes in. As we learn more about this issue, it

15 should be regularly reviewed not every month, but on the

16 term of number of years.

17 Thank you.

18 DR. EHRMANN: Thank you.

19 Dr. Sandifer?

20 DR. SANDIFER: Thanks, John.

21 Very quickly, Paul, I obviously missed

22 Wednesday's session, but in our previous meeting earlier

1 in the month two other issues that had come before our
2 working group related to marine mammals were a continued
3 emphasis to reduce what I will call "bytake," that is
4 "bycatch" in the fishing side of things, but also other
5 kinds of take that occur unintentionally due to whatever
6 activity is going on in the ocean including running over
7 the mammals with vessels and such, vessel traffic
8 issues, and so on. I think we discussed trying to
9 continue to emphasize technological and other solutions
10 to reducing by-take in marine mammals.

11 Secondly, I believe this was Dr.
12 Muller-Karger's point and perhaps Dr. Rosenberg's, that
13 we position the U.S. to continue and perhaps increase
14 its effort at the international level to reduce or

15 eliminate purposeful take of marine mammals. I believe
16 that captures some of our discussion before. I don't
17 see those on this particular chart, and I just wondered
18 if in your discussion it simply just didn't get brought
19 up this time or what? I do believe they ought to be
20 here.

21 ADMIRAL GAFFNEY: We intended to cover on the
22 second recommendation the international, to take a

1 strong international position because we actually know
2 more about it and are the best behaved
3 and we should assert leadership internationally.

4 The second one on bycatch ship strike, it
5 didn't make it here. We did discuss it and we do know
6 that -- I think we know, and Frank can correct me, that
7 the amount of harassment to marine mammals done
8 intentionally by nations that fish for marine mammals
9 and as bycatch, even by U.S. fishermen, greatly
10 outweighs potential damage by other kinds of potential
11 harassment mechanisms. We probably need to address that
12 here. Thanks.

13 DR. SANDIFER: Thank you.

14 DR. EHRMANN: Thanks.

15 Dr. Rosenberg?

16 DR. ROSENBERG: Thank you.

17 I second the issue on bycatch and other

18 sources of take, and would just remind commissioners and

19 staff of the workshop I was involved in last year, I

20 guess, around this time, indicating that the largest

21 source of take for marine mammals were worldwide by far

22 is by-catch and fisheries, not directed-take, but

1 bycatch; although, directed-take is a part of that.

2 I do know that the World Wildlife Fund is

3 trying to take to FAO an international initiative to

4 have an international effort to address those bycatch

5 problems. I think it is important to at least consider

6 that in our recommendations because it is by far, as you

7 point out, the largest source and is, in fact,

8 endangering a number of populations worldwide.

9 The U.S. has quite a good record in addressing

10 those problems; although by no means perfect, because

11 the funding levels for it are very low with so-called

12 "take reduction teams."

13 The interesting part of that is it is using a

14 process that is very, very much like the process we are

15 talking about for all of the other ecosystem management

16 principles where you try to bring together a group of

17 stakeholders to say how are we going to solve this

18 problem. It is grossly underfunded, so there is a whole

19 list of fisheries that haven't been able to pull

20 together a take reduction team, but where it has been

21 used it has been at least partially successful.

22 I also think on the funding issue we should be

1 careful not to just talk about harassment, because all
2 of that is in front of the Navy and oil and gas and so
3 on. There are lots of other issues with regard to
4 marine mammal research that aren't directly related to
5 those.

6 There are monitoring programs, population
7 assessment, and so on, that are quite extensive
8 programs. They are not done by Minerals Management
9 Service or the Navy.

10 In most cases, they are usually done by NOAA,
11 sometimes done by the state, sometimes done by
12 university partnerships. They are quite important, but
13 they are extremely resource-limited in maintaining long
14 time series.

15 I hope that as we continue to develop these
16 recommendations on marine mammal protection, and it
17 really needs to be broadened out to protected species
18 protection, because ultimately turtles come into this in
19 a big way, too, there is a critical need to maintain
20 those kinds of monitoring programs so you have some idea
21 of what is happening to these populations.

22 We happen to have a legal mandate in this

1 country not to harass, bother, irritate offend or
2 anything else a marine mammal, but we also want to make
3 sure we know what is happening at a population level
4 nationally and internationally.

5 It is quite difficult to do that on a
6 shoestring monitoring program budgets. I mean, the
7 fishing monitoring program budgets are pretty
8 shoestring; on marine mammals, they are getting really
9 down there; and on turtles, they are almost
10 non-existent. I think that needs to come in here
11 somewhere.

12 I don't disagree in terms of total sums of
13 money MMS and Navy are putting towards specific issues.
14 The dollar amounts are larger, but I am not sure that

15 that is including all of the marine mammal research and

16 the academic research, which is quite significant.

17 On the permitting issue, I think this is

18 actually really important that we move toward

19 programmatic permitting. I think that, in fact, we have

20 made a lot of progress in learning how to do permitting

21 reviews interagency, particularly between the Navy and

22 NOAA. I am not quite sure of the situation with Fish &

1 Wildlife.

2 We need to promote that kind of interagency
3 interaction to figure out, you know, what are the steps
4 we need to take to minimize impact. I think in the last
5 few years that I am aware with, it may have occurred in
6 other places, there has been a significant amount of
7 progress.

8 Tim McGee is here somewhere, and I know he is
9 involved in that. I think we need to commend that
10 effort because it is critically important.

11 You are not going to be able to do a
12 programmatic permit review or even a permit review and
13 have an impact, unless you get everybody sitting down
14 and talking about it. That effort needs to be in some

15 ways codified in our recommendations to continue to

16 extend it.

17 I think we need to come back to some of the

18 discussion we have had on best science of the idea of

19 doing some peer review on these permit reviews, because

20 one problem you have when you set permit review teams

21 together is that it can become quite insular.

22 I realize there are issues particularly with

1 commercial operations and Navy operations of security or
2 confidentiality, but at some point you need to have the
3 ability to have some peer review. Those teams like any
4 science teams, when they become somewhat insular, can
5 sort of start down a track and it is very hard to
6 deviate from that track.

7 Adding in a periodic peer review mechanism
8 from externals in some form, I think, is critical if you
9 are going to move towards programmatic permitting, but I
10 think it is the only way to go. It is not sustainable
11 to continue to do project-by-project permitting for all
12 of the various activities.

13 One final comment on permitting is we do need
14 to have some mechanism or ability to triage permits, so

15 that you are not spending staff time on reviewing a
16 permit for somebody who wants to go photograph a dolphin
17 compared to somebody who wants to do seismic
18 exploration.

19 It is just really hard for me, you know, to
20 figure out what the triage mechanism is. That needs to
21 be interagency as well because of course there is a
22 structural issue here of not all of the marine mammals

1 conservation is in a single agency. We will have to
2 come back to that at some point, but how we actually do
3 that triage I think is quite important so that we focus
4 on the biggest bang for the buck activities.

5 ADMIRAL GAFFNEY: If you had the opportunity
6 to read the whole paper at the state it is in right now,
7 that point was made, but I didn't put it on here for
8 space. The comment was to try to clearly define, I
9 think the word "triage" is better, who needs a permit;
10 who doesn't need a permit, go ahead and do it; and who
11 shouldn't even show up to ask for a permit to sort of
12 simply the life of the people that have to do the
13 permits; you know that. I think halfway through the
14 discussion maybe on bycatch, Frank, wanted to say

15 something.

16 MR. LOCKHART: (Microphone not working.) Can

17 you guys here me?

18 THE COMMISSIONERS: Yes.

19 MR. LOCKHART: One of the major last remaining

20 things that we are going to deal with in Stewardship is

21 the international living marine fish issues that covers

22 kind of the bycatch issues as well as the turtle issue.

1 I include that in there, so we will get to that, but it
2 is the last part of this discussion.

3 DR. ROSENBERG: Okay. But there is a bycatch
4 issue domestically, even though it is much smaller
5 compared to the international one.

6 DR. EHRMANN: Okay, very good. I won't
7 summarize that, since we just had a couple of speakers
8 and I think staff was keeping track of those comments.
9 There were a number of issues, obviously, raised related
10 to the marine mammal piece many of which I think are
11 covered in more detailed papers, but a number of
12 additional points of emphasis for the working group to
13 note.

14 Let's go then, Admiral Gaffney, to the

15 essential fish habitat recommendations.

16 DISCUSSION OF ESSENTIAL FISH HABITAT

17 ADMIRAL GAFFNEY: Okay. This is just one

18 graphic. I will ask Andy to help me here as he just did

19 even as I deliver it.

20 DR. EHRMANN: He even has a card up.

21 (Laughter.)

22 ADMIRAL GAFFNEY: We came to the conclusion in

1 our working group that the essential fish habitat
2 concept is just not working well and that a serious
3 definition has been illusive. Some people would define
4 an "essential fish habitat" as everything: all ground,
5 all water, all air, all food, everything.

6 When something is everything, then essentially
7 it can be nothing. We thought we should think about
8 recommending, and this may take statutory change,
9 eliminate the existing approach in the cottage industry
10 and bureaucracy that supports it in designating EFH's
11 essential fish habitats.

12 We prefer and another way to do this is there
13 may be a need to restrict areas or restrict functions or
14 activities in certain areas of the ocean and near-ocean

15 inland in order to protect a habitat. When you do that,
16 that should be a clear, transparent, science-based
17 basis.

18 One should look at the whole ecosystem when
19 you are thinking about habitat, not just something that
20 stops exactly in the, for example, the regional
21 fisheries management council area of responsibility, but
22 maybe much further inland in the estuary or up into the

1 watershed.

2 That designation, formal designation, of a
3 protected habitat can be done many ways. It can be done
4 as an MPA, and we discussed what we thought the rules
5 for MPA should be last time we met here, but also the
6 fisheries management councils can restrict certain
7 things on -- can restrict areas within their area of
8 responsibility, but it gets codified up at the National
9 Marine Fisheries Service.

10 We see the existing mechanisms as being
11 effective enough that we would push for a more regional
12 look at whenever a habitat is to be restricted in some
13 way, and that it be, again, finalized as a bonafide
14 restricted area to protect the habitat at the federal

15 level.

16 Maybe you can help me, if I need any more

17 there, Andy.

18 DR. ROSENBERG: Well, after those comments

19 about Stewardship being so big and tough, I really don't

20 think I will.

21 (Laughter.)

22 ADMIRAL GAFFNEY: Okay.

1 DR. ROSENBERG: A couple of comments. I think
2 there is a serious problem that has been recognized in
3 terms of utilizing the designation of "essential fish
4 habitat" because of the way it is codified. Of course,
5 ultimately when you overlay all of the areas, it is
6 everywhere. We keep telling the fish that they should
7 only go to those places that are important to them, but
8 they don't listen.

9 I don't think it is so much that we don't want
10 to continue to do the identification work, and that is
11 the science-based part. You want to continue to do some
12 very extensive research work on habitat, habitat effects
13 and so on. Ultimately, we knew to move to the point
14 where we are looking at habitat and considering how

15 habitat changes are affecting the population.

16 This is not marine mammals now, where you

17 don't want to irritate every fish, but it is a matter of

18 what is the population productivity impacts of habitat

19 changes or habitat loss. I think that is what is meant

20 sort of in expanding on the science-based approach in

21 proposing protecting habitats.

22 What didn't quite get in here that I think we

1 talked about a little bit is that there are some
2 technology issues. You want to reduce fishing impacts,
3 and you want to reduce impacts from other activities.
4 There may be many ways to do that other than simply
5 saying, "Don't fish," or, "Therefore don't, you know--"

6 ADMIRAL GAFFNEY: Pollute?

7 DR. ROSENBERG: "Anchor in an area," or, you
8 know, whatever, "Don't run ships through an area," or
9 whatever it might be. Right now, we don't really have a
10 mechanism, other than the cooperative research
11 mechanism, for exploring a lot of those ways to reduce
12 habitat impacts and so we need to sort of foster that
13 exploration of ways to do that with incentives to do so.
14 Some of the reason for that is you can't pick

15 just the spots that are the most important, no matter
16 how good your science is because some species are going
17 to be everywhere, not just fish broadly speaking. Some
18 living marine resources are going to be everywhere, and
19 so you want to reduce the habitat impacts everywhere.

20 I think there are technological ways to move
21 in that direction. Then, you want to pick the places
22 where, you know, the risk is just too high. There is a

1 risk assessment component of this that I know the
2 Fisheries Service and the councils and the states are
3 struggling with right now to figure out what are the
4 riskiest activities. That is quite a difficult task.
5 It needs to move along in that same adaptive management
6 approach. Finally, you know, moving into
7 ecosystem-based management, thinking of it broadly in
8 that context I think is helpful.

9 DR. EHRMANN: Okay. I want to make sure they
10 got your comments Andy, and then I think Frank has a
11 comment.

12 MR. LOCKHART: Your discussion on not just
13 protecting habitat, per se, but also activities, that
14 was a casualty of trying to get it one slide. The

15 second bullet restrictions means all kinds of
16 restrictions, not restrictions or activities or gear
17 types and things like that. That was in the original
18 paper.

19 DR. EHRMANN: Dr. Hershman?

20 DR. HERSHMAN: Yes. I guess this is the area
21 that really calls out for some broad, integrated
22 approach. You mentioned MPAs, which I guess is the

1 broadest term now being used for habitat identification
2 anyway for protection or restoration of living
3 resources. There is another recommendation that I think
4 was discussed at our last meeting on marine-protected
5 areas.

6 ADMIRAL GAFFNEY: Right.

7 DR. HERSHMAN: Is that linked to the notion of
8 the fish habitat being given special consideration for
9 that, or do you see marine-protected areas for a more
10 limited purpose than fish habitat? This is something, I
11 guess, in my own mind needs a little more clarification.
12 I just wondered what your thinking is about how that
13 links up?

14 ADMIRAL GAFFNEY: Maybe we should write that

15 down. I guess I see a marine-protected area being for

16 lots of things; it just shouldn't be frivolous. It

17 could be for habitat or it could be for some other

18 reason altogether that may not even have to do with

19 fish.

20 DR. HERSHMAN: Right.

21 ADMIRAL GAFFNEY: Habitat sort of, E-F-H,

22 because of the "F" in it is about fish, I think.

1 DR. HERSHMAN: Right.

2 ADMIRAL GAFFNEY: We think there are other

3 existing mechanisms that you don't need another

4 bureaucratic process that could be just as effective:

5 MPA is one; if it is all within the regional fisheries

6 management council, geographic regime, that is another

7 that already exists.

8 DR. HERSHMAN: All right. Well, I understand

9 that, but what I do see is sort of a multiple layering

10 of areas identified for protection for various purposes.

11 ADMIRAL GAFFNEY: Correct.

12 DR. HERSHMAN: Birds, basic habitat, wildlife,

13 fisheries, and all of that sort of thing. I am just, I

14 guess, struggling in my to know whether or not there is

15 some sort of single, comprehensive system that can
16 emerge here or whether we are really destined to just
17 identify specific spots for specific purposes, and then
18 we end up with a map that is just filled with these
19 circles all over, that are overlapping and all that sort
20 of thing.

21 DR. ROSENBERG: We currently have or are
22 starting to have.

1 DR. HERSHMAN: Yes.

2 ADMIRAL GAFFNEY: Yes.

3 DR. ROSENBERG: I think you need to fish here

4 -- sorry, you need to read the "fish" or "fisheries

5 habitat" much more broadly. I mean, it is not obviously

6 just things with fins, and that becomes a struggle.

7 However, we currently have critical habitat areas for

8 protected species.

9 ADMIRAL GAFFNEY: But it is not for marine

10 monuments or those kinds of things.

11 DR. HERSHMAN: No, I understand the

12 distinction there, a cultural area or a shipwreck or

13 something like that. Well, I think it is just an area

14 that we have to come back to.

15 ADMIRAL GAFFNEY: Well, maybe when we look at
16 this and we look at what we discussed last time together
17 we will figure out whether we have confused or
18 clarified. It is clearer in my mind, but I was
19 there. If it is not clear in your mind, then we
20 probably need to do a little bit better definition.

21 DR. HERSHMAN: Thank you.

22 DR. EHRMANN: Very good. Let's go then, if we

1 might, to the last section of the Stewardship report on
2 coral reef ecosystem protection.

3 DISCUSSION OF CORAL REEFS

4 ADMIRAL GAFFNEY: Okay. If you are reading
5 along, there will be two graphics. The working group
6 recognized that there is a decline that we should be
7 worried about in the health of the coral reef ecosystem
8 either by direct things that humans do, like striking it
9 with your ship or inappropriately capturing ornamental
10 fish or indirectly through pollution of some kind of
11 chemical constituent or sediment runoff, as we saw in
12 Puerto Rico and heard about in Hawaii.

13 Therefore, we have a few recommendations: One
14 is so far we have been convinced that the Coral Reef

15 Task Force is good, effective, and should remain as a
16 discreet, active entity. It should be given the job of
17 developing coral reef strategies for the national body.

18 We noticed that the Department of Energy is
19 while not the major player in global climate change
20 recess is a significant enough player. Since there is
21 an at least perceived linkage between climate change and
22 reef health, that it would be a good idea to have DoE

1 representation on the Coral Reef Task Force, a small
2 recommendation.

3 A bigger recommendation is that the Coral Reef
4 Task Force representative have a legitimate seat at the
5 table that is looking at integrated, sustained -- and
6 let me not say ocean observing system, but an
7 ecosystem-based observing system as it might be just as
8 important that they sit with watershed people as they do
9 with classical oceanographers.

10 Next. Okay, good.

11 We find that at least in U.S.-controlled
12 waters, at least out to the EEZ, that there is not a
13 comprehensive map of what is a coral reef and what
14 isn't. For good stewardship reasons and maybe for

15 enforcement and even damage repair reasons, it would be
16 good to know what a coral reef is and where it is and
17 how we delineate its limits. That is also a
18 recommendation out of the report that just came from the
19 Department of Commerce, in fact their very first
20 recommendation on coral reefs.

21 There is within the Marine Sanctuaries Program
22 a provision to if one damages the marine sanctuary in

1 some way that the damaging person, party, is required to
2 give money back to repair that damage. The money
3 doesn't get siphoned, thrown into the general fund, but
4 goes back to the Marine Sanctuaries Program. We thought
5 it would be useful to explore how one might expand that
6 concept to include coral reefs, another reason to
7 designate what a coral reef is so that there won't be
8 frivolous claims.

9 There may be some overhead here. This is not
10 on the slide and we haven't discussed this in class in
11 our working group. When you do this, of course there is
12 some responsibility for you to watch the coral reefs and
13 there is some overhead to monitoring it. You would have
14 to look at that, but, nonetheless, we thought that the

15 marine sanctuary provision might be useful to expand to

16 other areas.

17 Finally, this is an area where international

18 leadership is needed, and we think that we should

19 provide it using our research strength as one of our

20 best cards for gaining, asserting leadership in the

21 international forum.

22 Also another carrot, if you will, might be to

1 if we can credibly determine that a nation to whom we
2 have given loans of some sort, we can fully or partially
3 forgive the debt, if they behave themselves properly
4 around the coral reefs in their own countries.

5 We thought it would be useful, if we are in
6 that international forum, to strive for international
7 standards that limit the capture of ornamental fish from
8 coral reefs around the world, especially ours. A
9 facetious comment made in our working group was this
10 might be something that you might want to contact the
11 drug czar about, because this is a supply and demand
12 problem.

13 We have a supply on our reefs, but we are also
14 the biggest demander of ornamental fish. This is a

15 hard, hard problem, but being active in the

16 international community it would be important.

17 Thank you.

18 DR. EHRMANN: Thank you.

19 Dr. Rosenberg?

20 DR. ROSENBERG: Two comments: The first one

21 is on the last point, on ornamentals. I think there is

22 an issue with fisheries on coral reefs, not just

1 ornamentals. It is a broader fisheries issue and
2 concern about fishing techniques for consumption, not
3 just for ornamental use.

4 ADMIRAL GAFFNEY: Okay.

5 DR. ROSENBERG: The second one I think is more
6 far ranging in the sense that there has been quite a lot
7 of recent work on deepwater temperate coral reefs, not
8 just tropical reefs.

9 Although it is not specific here, there is at
10 least the sense of that, very large reef resources,
11 certainly in Alaska and certainly off of the Coast of
12 the U.S. in many, many locations as well as
13 internationally.

14 There, clearly, is a need for a significant

15 research effort to understand a little bit more about

16 those temperate reef resources. I think they are all

17 temperate, but I am not sure of that actually.

18 ADMIRAL GAFFNEY: Are you talking about a

19 better definition?

20 DR. ROSENBERG: A better definition and just

21 understanding what is there, where it is, and how those

22 systems function and how they might be impacted by human

1 activities because there is quite a significant
2 ecosystem out there, clearly, that we know relatively
3 little about. Well, most ecosystems we don't know all
4 that much about.

5 This one is very large, and we don't know a
6 lot about it. I think that we need to at least capture
7 in here that this is more than the coral reef issue, and
8 there is a significant area of research and, ultimately,
9 concern for temperate reef in deep water.

10 DR. EHRMANN: Dr. Sandifer?

11 DR. SANDIFER: If everyone is -- has everyone
12 finished on this topic?

13 DR. EHRMANN: I believe so.

14 DR. SANDIFER: Any other comments on the coral

15 reef recommendations?

16 (No verbal response.)

17 DR. SANDIFER: I simply wanted to wrap up the

18 Stewardship Working Group report. First of all, to

19 thank Admiral Gaffney for such a stellar job. I think

20 he got through more than I ever did in a day, so I will

21 volunteer him to serve as chairman at anytime.

22 Secondly, for those of you who might want to

1 know, we have a number of things left before us.
2 Remember that the basic elements or basic areas that the
3 Stewardship Working Group is in living marine resources
4 and in pollution and water quality.

5 Earlier this week, we spent a good bit of time
6 on aquaculture issues. We are not quite ready yet, as
7 you can tell by this report, to bring anything to the
8 Commission as a whole for consideration, but I would
9 expect that in the not very distant future.

10 We also spent some time both within the
11 working group and in other groups speaking a little bit
12 about how we might structure regional science programs
13 that would go under this overall regional coordination
14 approach we are talking about. That is also not quite

15 ready for prime time, as you might say. We made quite a
16 bit of progress yesterday in our discussions, and so I
17 expect we will return with something more concrete
18 there.

19 As Frank Lockhart has mentioned and the next
20 area that we will spend a good deal of time on when the
21 working group meets again will be the whole area of
22 international living marine resources issues. I will

1 not bore you with this entire shopping list of things
2 that we have yet to come to complete agreement on. We
3 have got a lot of things yet to do, and we will be back
4 in touch, Mr. Chairman.

5 Thank you.

6 CHAIRMAN WATKINS: Well, that completes the
7 agenda prior to public comment. I want to thank not
8 only the commissioners, but the Science Advisory Panel
9 members, some of whom are still here with us in the
10 auditorium. We had half of them here, 13 out of 26 top
11 people, from around the country who have been absolutely
12 superb in their advice to the Commission, giving us
13 perspective that we might not have grabbed otherwise.
14 We are very thankful to them. The time that this

15 Commission and the commissioners have put in on this is
16 impressive. I have been chairman of another
17 presidential commission, and I have never seen anything
18 quite like it. You have seen from the quality of the
19 questions and the responses up here that we have got a
20 very talented Commission in my opinion. We are going to
21 give the President and the Congress a good report.
22 Whether it will be carried out will largely be a measure

1 of the power of the American public, the NGOs, the
2 academic community, the science and technology community
3 and industry that wants to get involved, and the other
4 pressures that come to bear to say that this is an
5 important national issue. I hope that those of you here
6 today will be a part of that movement, to make sure that
7 when we come out with something that is sensible here we
8 really do something with it. I am encouraged by the
9 progress we have made. We are just about three-quarters
10 through the issues. We have a meeting, as I announced
11 earlier, on April 1 for a working group session to
12 prepare us for the public discussion similar to that we
13 have had today on April 2 and 3 here. I believe it is
14 at the Reagan Building again? It is not? Do we know

15 yet?

16 A PARTICIPANT: It is at GW.

17 CHAIRMAN WATKINS: Oh, it is at

18 George Washington University. Anyway, it will be

19 announced at the right time here in "The Register" when

20 we have our next meeting.

21 In the meantime, we will have at least two and

22 probably three working group sessions, special ones,

1 here in Washington where they will again struggle
2 in camera to deal with some of the tough issues that we
3 face prior to the April meeting that will prepare us
4 better for airing those things.

5 We have got a tight time line on us to do all
6 of this work, prepare a report, get it out to public
7 review and get it to the President in late June. We
8 will do everything we can to stay on schedule. We are
9 keeping our own feet to the fire. We are moving as
10 aggressively as we can.

11 It is an overwhelming task and we have got
12 outside reports still due to us on legal review on
13 consistency and laws. There are 140 laws, a huge
14 project that we have some problems with the interim

15 report we have received.

16 We are going to be meeting with them to clean

17 up some of the comments that will come in from a variety

18 of agencies, and other people that are interested in

19 that work. We have plenty of work to do, but we are

20 gung ho.

21 We are excited about the prospects of a good

22 report. We are pleased that we have all of you here to

- 1 listen to our public discussion. The slides you saw
- 2 today will go on our Web site as we did in the last
- 3 session here at the Reagan building and to keep people
- 4 informed and encourage their comments to keep flowing
- 5 into the Commission.