MARINE PROTECTED AREAS FEDERAL ADVISORY COMMITTEE

RENAISSANCE WAILEA
MAUI, HAWAII

THURSDAY
SEPTEMBER 23, 2004

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AGENDA

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CHAIRPERSON BROMLEY: All right. I think we'd best get underway. Thank you. Lauren is going to make a few organizing logistical announcements.

MS. WENZEL: Okay. Good morning, everybody. I just wanted to remind folks that we have a reception hosted for us by the Hawaiian Islands Humpback Whale National Marine Sanctuary this afternoon, and it starts at 5:30, and you all know when the sun sets, so they've asked us to get down there so we can be sure and watch the sunset. So I think we want to try to adjourn at 5:00 and leave shortly after that, and we're going to organize some carpools. Parking is limited down there, so they've asked us to please be sure and carpool and to go ahead and double park and park along the road, if necessary, once we get there. So just don't be surprised if it's a little tight once you get in there, but they want us all to come and they just said, We'll squeeze you in.

So I'm going to pass around a sheet for carpooling. If you drove and you can take people, that's great. If you didn't drive and you need a

ride, just go ahead and sign up for one of the cars. All the people who signed up as drivers are happy to take people. And just make sure this yellow sheet gets back to me or out to Bunny once it's gone around the table.

And there are maps to the reception in your packet. For gas -- I'll make sure that you get copies of the map. It's about a 15-minute drive from here and it's a little hard to spot. So maybe at the end of the day, I'll just give you a landmark and just remind you how to find it because it's right on the Kihei Road but it's easy to drive past it.

All right. Thanks.

DR. CRUICKSHANK: Lauren, when will that be over?

MS. WENZEL: Around 7:30. And they're going to be providing us with, you know, heavy hors'doeuvres/dinner.

UNIDENTIFIED SPEAKER: Excuse me, Lauren. Heavy pupas?

MS. WENZEL: Yes.

CHAIRPERSON BROMLEY: French hasn't made it this far West; right? Wonderful. Okay.

We are at the public comment period, the

second one. We had one on Tuesday and now today. So we had initially told people five minutes, but given the paucity of commentators, if you want seven minutes, you may have it. So five to seven minutes would be wonderful.

So our first commentator is Mr. Isaac Harp. Is Mr. Harp here?

(No response.)

Mr. Harp is not here; right? Okay.

The second one is Kimokeo Kapahulehua.

MR. KAPAHULEHUA: (Begins by singing in Hawaiian). Kanawa, He was the god of water. (Speaking in Hawaiian. Singing in Hawaiian) The water god, he's a god of power. The biggest power that he's given us is what we are, where we are, and where we go. (Singing in Hawaiian). Kanawa, the god of the sea. Making sure that everything is well out there, you, marine protected areas. Kanawa will look upon you and praise you and thank you for all the things that you do out there with him. And keep it in still how it was before. If not, to bring it back and manage.

My name is Kimokeo Kapahulehua. I was born and raised on the Island of Hawaii, moved on the

Island of Maui since 1972. My father born and raised on the Island of Nihau. My mom, born and raised on the Island of Kauai.

Today, I come before you as the President of the Maui Fishpond Association to tell you about the importance about Hawaiian fishponds in the State of Hawaii and all the Pacific. We're really honored to be in partnership with Hawaiian Island Humpback Whale, where you'll be having your pupu party this afternoon. I encourage you to look toward the ocean on your left side. This is our fishpond called bohiahimokubiba ph). We have been an organization of non-profit since 1996 and have been working with different federal, state, and county agencies to have a permit to go and revitalize the wall of this fishpond. We recently have been given and grant permission from Department of Land and Natural Resources Board. And looking at our last permit, which would be the least, and that would be given recommendation of approval in the Department of Land and Natural Resources Board meeting on October 8th. If that is granted on that day, we'll be start working and revitalizing this wall.

We have more than five different types of fishponds in the State of Hawaii. We have Kuapa,

Pu'uone, Wai, Kalo, 'Ume'iki. In the State of Hawaii, in research, we had more than 488 fishponds. Today, we have less than half of them left. They're either owned by the State of Hawaii or they're owned privately or they're owned joint venture.

I wanted to tell you that in the last few years, Pacific American Foundation received a grant to do what we call curriculum and training the teachers to teach Hawaiian fishponds in Department of Education. It was a resolution approved by the state, and so we have been out there and doing that for more than 40,000 students in each of the Islands.

Last year on the Island of Maui, we had more than 12,000 students that's come to a fishpond.

Recently, with the sponsorship program with Hawaiian Island Humpback Whale and ourselves, we have been awarded a grant for a thing called MORV, miniature oceanic research vessel. This vessel will go out to the fishponds, have a depth of 50 feet camera, and be able to take the quality of the water and a wireless monitor that will come back to the child and be able to take things important from that.

In conclusion, I wanted to tell you that ancient knowledge with high-tech knowledge will

preserve our marine life forevermore. And our children for the future will be able to develop more ideas in preservation. I come before the Marine Protected Area Commissioners that you look into the ponds that are owned by the State of Hawaii and by the private sectors and see how we can preserve these areas to continue education for the children as young as preschool all the way up to college. Some of them will not have the opportunity to go to University of Hawaii or any other university marine program. So I feel it's really important that you consider this report and look into the State of Hawaii Pacific on the ancient fishpond and make sure that these that are owned by our government are still protected so we may continue our marine science and our culture science and culture knowledge with the youth of Hawaii and the youth of the world for tomorrow.

I thank you for your time and appreciate you being on our Island and bringing many, many great knowledge to us. Mahalo.

(Applause.)

CHAIRPERSON BROMLEY: Mahalo. Okay. Craig Severance.

MR. SEVERANCE: Today I'm speaking as an

independent-minded academic, but you do need to know that I sit on the Scientific and Statistical Committee and the Marine Protected Area Working Group of the Western Pacific Council.

Two quick things: First, I really appreciate your subcommittee's use of the term "customary knowledge," but I agree with Bonnie that needs to be defined rather broadly so it's kind of all-inclusive because every group has customary knowledge. Part of the increasing diversity we have in our region, particularly in Guam and CNMI and in Hawaii are increasing numbers of immigrants from the freely-associated states. And they too, have customary knowledge that can be drawn on for resource conservation efforts.

Secondly, with respect to the Executive Order and the Northwest Hawaiian Coral Reef Ecosystem Reserve, as it marches towards sanctuary, there is a process that really, in my view, needs to fully include an adequate social impact assessment on the affected communities, including the community of bottom fishermen on Kauai, who are stakeholders in terms of the fishery up there.

To monitor the condition of the bottom-fish

stocks effectively, you may need to be able to have some level of continued fishing and some level of fisheries-dependent data.

So I would urge you as a committee to pay attention to both Congressional statutes -- the Sanctuaries Act and the Magnuson-Stevens Act -- as well as the Executive Orders, look at some of the potential overlap in jurisdiction and potential conflict between those statutes, and keep NEPA in mind because, from the perspective of some of the members of the bottom-fish community -- and I have talked to some of them -- this has not really been bottom-up. It has been more top-down. It has not really even been side by side.

Thank you.

CHAIRPERSON BROMLEY: Thank you, Craig.

(Applause.)

Jim Walsh.

MR. WALSH: Thank you all for coming here and doing the work that you're doing, being here for a couple of days listening to what's going on. It's -- you have your work cut out for you.

I'm here representing Malama Kai. Malama Kai is a non-profit organization dedicated to ocean

stewardship for current and future generations through community service and public education.

Founded in January 1991, Malama Kai raises funds to sponsor projects that help conserve Hawaii's coastal and marine resources and to educate people about these resources.

One such project are the day-use moorings. Day-use moorings have been proven around the world to be an effective tool to reduce the damage to coral reefs caused by anchors. Malama Kai Foundation has been actively raising private funds to pay for installation, mapping, and maintenance of these day-use mooring buoys in the near-shore waters of Hawaii.

The Malama Kai Foundation sees the MPAs as a vitally important aspect for the protection of our marine resources in Hawaii and the nation. Malama Kai applauds the national effort and the Marine Protected Areas Center in their efforts to improve stewardship and effectiveness of the MPAs. The Malama Kai Foundation believes that community involvement is the key to successful management. Stakeholder participation in the development and implementation of MPAs is critical to good decision-making and long-term success.

Top-down MPA development processes have not worked well in Hawaii and have contributed to increased polarization between stakeholders and agencies.

Stakeholders need to be identified at the outset of the process and their ongoing input considered as a critical element toward the implementation and site selection of an MPA.

Input from stakeholders that are opposed to an MPA are just as important as input from those who favor an MPA. Stakeholders should remain involved in the process after site selection and implementation to help monitor and measure the effectiveness of an MPA. People must understand the process and timetable at the beginning. Traditional customs and practices of the local community should be identified, clearly understood, and considered important to the process. Local knowledge and expertise of marine resources is important and should be merged with scientific data to assist with MPA development and site selection.

Communication with the community should utilize a variety of methods -- media, print, radio, Internet, e-mail, etc. -- in order to reach the broadest range of potential stakeholders.

Socio-economic factors are also important. The most successful MPAs have community buy-in and support. In order to achieve buy-in and social -- in order to achieve buy-in, the social and economic impacts must be identified, understood, and integrated into the MPA goals, objectives, and measures.

Conducting appropriate social science research is as important as biological research. The Malama Kai encourages the funding appropriate to -- we encourage the funding of appropriate social science research and enhanced understanding of the human dimensions of MPA.

On behalf of the Malama Kai Foundation, thank you for giving us the opportunity to speak to you all. Thank you.

CHAIRPERSON BROMLEY: Thank you very much.

(Applause.)

Thank you. Rob Parsons.

MR. PARSONS: Good morning and aloha, distinguished members of Marine Protected Area Committee. My name is Rob Parsons. I'm Executive Assistant to Maui County Mayor Alan Arakawa for Environmental Concerns. I'm the first-ever so-called Environmental Coordinator for Maui County, and I'm

here principally just to give you a little perspective from Maui Island and from county government to our marine resources.

And if there's one message I want to give you, is we are not doing enough, we are not allocating enough. We're losing ground. I believe we've been losing ground with the marine ecosystem at least for the last century. Our mayor is a life-long diver and has seen the degradation in his 50 years here of our near-shore water resources due to overfishing, more people, also storm runoff, and also to commercial activities.

I wish we had more resources allocated. I'm one person. I don't have a staff. I don't have a budget. Yet I'm very, very privileged to be a voice for the environment, that which draws so many people to our island, over two million visitors a year to Maui alone, and much of this is, of course, our ocean resource is the attraction.

A few things I'd like to bring to your attention. One is that, you know, traditionally here in the Hawaiian Islands, the way resources were managed were through the ahupua'a system, and that system linked what happened all the way to the top of

the mountain with what happened into the sea. And the distinct ahupua'as were managed by a konahiki, or chief, who would guide how resources were allocated -- how water was allocated to taro farmers, who was allowed to fish where and when with the tides and the moon. So the idea of local stewardship still has merit, perhaps more than ever.

I'm a diver myself. My wife and I were diving just perhaps a mile south of here a month ago and saw a small posse of spear fishermen going by. And in the dragnet behind one of them, I looked to see -- it was bulging -- and it wasn't fish in it. It was a very large shell, probably a helmet shell -- I couldn't tell -- and at -- I'm a shell collector myself but I never, never pick up a live shell and I'm wondering how this grandfather shell of probably 20 or 25 years, just how someone could take that for a meal that might last 15 minutes, and it took 25 years for this shell to achieve this. And it's a real rarity to see this kind of shell here. They just barely exist except perhaps in the northwest Hawaiian Islands.

So I guess this brings about the need for much greater education here, starting very early. I don't know if that's in your purview to tell us how to

educate our youth, but I do want to give you that message.

Finally, we had a decision about three months ago from Judge Mollway here, Circuit Court judge, who repealed or interpreted a ruling of the ban of thrill craft. What we refer to as "thrill craft" are jet skis and parasails -- during the humpback whale season from December 15th to May 15th. This law was passed back in '92, I believe, and has been effective in ensuring that the humpback whales, as they come back to breed and to calve, have a little more peace.

And the interpretation that was made -- some of you may already be aware of it -- is that we don't have the local jurisdiction over the federal legislation. I hope that we can overturn this or return to some sanity before December 15th.

There's been a lot of talk of self-regulation by the industry. I don't believe it works. You know, they say, Well, we want to conduct tours during the Easter season because there are more people here and during the Christmas season because there are more people here, and we'll back off the rest of the time. I just think we need to ensure that the federal marine mammals are protected under the Marine Mammal

Protection Act, and I ask your help and invite you to contact county government, ask for the Environmental Coordinator. If any of you have any particular insight on that, I'm -- I've understood that there may be appropriations through Senator Inouye's office which addresses this, but I really want to be 100 percent sure before we get back into this season that we're doing the right thing.

And I thank you for being here today and for consideration of all that is said and thank you. As we say here, malama pono -- please take care wisely. Thank you.

(Applause.)

CHAIRPERSON BROMLEY: Thank you. Can you answer a question?

MR. BENTON: I'm interested in this court case. I was just wondering if you could provide us with a copy of the decision because, in my part of the world, we have the -- we've got the same whales and the same problem -- a little different climate maybe -- but I'd like to -- I'd be very interested in that if you could provide that, a copy of the decision that overturned your regulations.

MR. PARSONS: I'm working locally here with

Naomi McIntosh of the Hawaiian Islands Humpback Whale National Marine Sanctuary, the seven-letter acronym. She's the one that provided me the information about Inouye's office and appropriations. I still don't understand how that Act will --

MR. BENTON: I'm asking about the judge's decision, just a copy of that decision.

MR. PARSONS: I am told that I can provide you with that.

MR. BENTON: Okay.

MR. PARSONS: And I will be happy to.

MR. BENTON: Thank you.

MR. PARSONS: Thank you.

CHAIRPERSON BROMLEY: Thank you. Good. Okay. Robert Wintner, a familiar face. Thanks for coming back. You missed us at --

MR. WINTNER: Yeah. Thanks.

Most of you know that I made comments two nights ago, and I came back because, after my comments, I was asked a question, and I'm sorry I didn't address it at the time. I'm going to address it now.

When I spoke the other night, I made the comparison of -- not that long ago, maybe -- I don't

even remember -- 20 years -- when in a room like this if you enjoyed your Salem long or your Pall Mall straight, you could just light up. And now if anybody lit up, you'd think that that was crazy.

And I think there's a similar situation going on on many of our reefs, and I think it's a good comparison, and I want to repeat that because I'd like for everyone to keep it in mind.

I also spoke about the -- one of our two MPAs here on Maui is Honolua Bay. And I spoke about the coral as recently as ten years ago being beautiful, colorful from rim to rim, all the way to the center. Now, there's one strip in the center that's left still living. The rest is dead and dying.

And the day that I observed that, there were 150 snorkelers jumping in the water off a boat and saying, "Oh, my God, it's just amazing. It's wonderful. It's beautiful."

At Snorkel Bob's, we had our biggest summer ever. And what that tells me is that in ten years that remaining strip of live coral will be reduced to about ten square feet and 200 more people -- or then it will be 600 more people from the Midwest will be jumping and saying, "There it is right there. It's

amazing. It's beautiful. Did you see it?"

The question that I was asked at the end of the meeting -- I guess it was Tuesday night -- is, Okay, you are in the snorkel business. How would you feel if there was an MPA with no snorkeling allowed? And my response instant. It was, "Yeah, let's do it."

Just for those of you who don't know, Snorkel Bob's is the first and the largest reef outfitter in the State of Hawaii. We put between 500 and 1,000 people in the water every day. We're the only snorkel gear manufacturer in the history of Hawaii. We don't buy OEM products and put our name on them. We designed, developed, engineered, and built the tooling on masks, fins, and snorkels. We think it's the best snorkel equipment in the world, and we're heavily, heavily invested in it.

And I am prepared right now to say, yes, we need MPAs in series and as many of them as you think should allow no snorkeling, please let's proceed.

There was a really unsavory tour guide that came out last year -- I don't even want to mention the name of it because, as far as I'm concerned, it's kapu -- it's forbidden, it should not be mentioned. And it directed tourists to trek across the lava to many

secluded reefs and jump in and snorkel. So now you'll see people who are not physically fit hiking 30 minutes across the lava, they shouldn't be there for their own safety. Many people following -- I shouldn't say "many" -- several people following these directions have been seriously injured, a couple fatalities. It's just not necessary. There are plenty of reefs to direct human activity to.

And I was glad to hear the mayor's representative discuss the ahupua'a system and I think that the salient point that everyone needs to listen to here is that reef stewardship must be resource-based and not economically-based, and I think I'm qualified to say that because I'm an integral part of the economic base.

What we have learned at the other MPA here on Maui, Ahihi-Kana'u, there was a great study done a few years ago showing that if you have an MPA, well then the fishing stocks increase on either side of the MPA. Well, if anybody in the world is smart enough and has the instincts to figure out where the fish are, it's fishermen, and they know this. And so now Ahihi-Kana'u is so overfished on both sides that the stocks inside the MPA have depleted.

So what we need are MPAs in series. I have a few favorite reefs that I would love to see reserved or protected. If you want to say no snorkeling, let's proceed. All the reefs are dying and we need your help. And I appreciate you being here. Thanks very much.

(Applause.)

CHAIRPERSON BROMLEY: Thank you. Thanks.

MR. ZALES: Mr. Chairman, can I ask a question?

CHAIRPERSON BROMLEY: Yes. Yes. We can ask questions.

MR. ZALES: I appreciate your information. You mentioned something about somewhere in the neighborhood of about a thousand snorkelers a day snorkeling. Out of those thousand snorkelers, what percentage would you think when they're out there snorkeling are touching and grabbing and picking up and standing on the various corals that are there?

MR. WINTNER: You know, people are much more aware now of snorkelers' impact. There was a long time when we enjoyed immunity. Well, what does a snorkeler hurt? And I would say that there's two areas now that are paramount that snorkelers do have

an impact on the reef, and we're going to address those.

I would say that we'll be ready to unveil two programs next spring. It's the next big boost in tourism will be beginning spring break, this March of '05.

The first that we're going to promote is fin awareness, and the way we're going to do that is, you know, we deal with a lot of people who are seeing the ocean for the first time and we can't fault them. All we can do is try to guide them. And as things reveal themselves and we get smarter and we try to make them smarter, too.

The biggest bad habit is people standing on the coral to adjust their masks, which they could have done much easier anyway on the beach, so we're going to -- we're altering our in-store program right now so that every customer will not only get fitted with the mask -- it's something that we just took for granted. People who get in the water say, "Well, yeah, you adjust your mask." But if you've never been in the water, you don't know that. So if we adjust their masks in the store, yes, they'll have no need to stand on the coral.

And the other thing is basic fin awareness, just as far as kicking. If you go to a reef where there's quite a few tourists. You'll see that they're not as comfortable in the water as experienced divers or snorkelers, and the kick is frenetic and it's -- they bend their knees and they're just looking for some kind of traction anywhere, and they're mindless of what they're touching. Fin awareness is something that's intangible but it has to be imprinted in their minds or their thought process, and we're going to do our best to facilitate that.

The other big impact -- I can't give you a number on how many touch the reef. I would guess it's most of them, and they need to be told. We're doing two more programs -- Please don't touch anything. Okay?

The other big impact is sunscreen. We're going to do a really non-profit -- and I use that term figuratively -- campaign on two new products -- it's gonna be a package deal. The other big impact is sunscreen. Sunscreen does kill coral polyps, okay?

One is a swim cap for those of us who are concerned about our heads getting sunburned while snorkeling, and a rash guard. For those of you who

don't know, a rash guard is a nylon shirt that gives you a hundred percent UV protection. They're really uncomfortable historically. We have a line on some now that fit loosely, they are comfortable, they dry in a matter of minutes, and they completely eliminate the need for sunscreen in the water.

Those are the two big campaigns we have coming up, and I hope that answers your question.

CHAIRPERSON BROMLEY: We have two more questions. I plead for short questions and short answers. Rod and then Gil.

DR. FUJITA: Thank you, Mr. Chair, and thank you, Mr. Wintner, for your comments and for your commitment to conservation. You made a really important point, I thought, when you mentioned that people who are new to the area really love the snorkeling and thought it was beautiful even though the coral was dying and dead compared to ten years ago. We call that "the shifting baseline phenomena" and it's not unique to Hawaii. I've seen it everywhere in the world.

I'm wondering if you can offer us some suggestions on how to overcome that through education or policy actions because it's a very serious problem

that we have to deal with.

MR. WINTNER: Yeah. I can't give you a short answer on that, and that's what I have been asked --

CHAIRPERSON BROMLEY: Well, in that case, --

MR. WINTNER: All I can say is I know there's quite a bit of emphasis on education, and education is critically important. Education takes a long, long time and there's a huge difference between the warm and fuzzy feeling of, Oh, gee, we're doing the right thing now, because this is what we heard three or four times since we landed at the airport. There's a difference between that and, We can't do that. It's against the law. And what we read right now are some pretty strong rules. You cannot do that. That's why I'm here to tell you if you have to have an MPA with no snorkeling, let's proceed.

CHAIRPERSON BROMLEY: Thank you. Good. Gil.

MR. RADONSKI: Just a brief observation on sunscreen. If people don't believe what you're saying, go down to the swimming pool here and just touch the tiles right above the water line and you'll find out the impact of sunscreen.

My question to you is: How prevalent is your attitude within your industry?

MR. WINTNER: I think we're fairly unique, and I don't say that as a source of vanity. I just think that, you know, Hawaii is -- has the highest attrition -- the highest failure rate for small businesses anywhere in the country. It's hard to make a go here. Okay?

We have a very dedicated following because we provide good service and good quality and nobody gets taken advantage of -- and I'm not suggesting they do in other places. I'm just saying that it's hard to make a go here. It's known as tax hell. For those of you who are not familiar with "tax hell," what that means is ten percent of the net, four percent of the gross. That plus insurance for all your employees, it's hard to make a go here.

We have enjoyed a position -- and I guess it's along with my personal passion, which is not -- it's not unique to me. I know many people in the dive and snorkel industry have it, but there are many people who don't.

There's a movement afoot now to have pump-out stations. Well, on Maui, it would be at Lahaina Harbor, Maalaea Harbor, and Kihei Boat Launch. And it's being handled by non-profit groups. Now, why is

that? And because -- without these pump-out stations, the charter boats have to discharge out in the water. It's going on right now. We need help with rules, and they need to come from people with credentials like you because you have credibility.

MR. RADONSKI: Also it has to come from your associations.

MR. WINTNER: Well, yes, but they need -- we need rules, and we need enforcement.

CHAIRPERSON BROMLEY: Good. Thank you so much.

MR. WINTNER: Okay.

CHAIRPERSON BROMLEY: Okay.

(Applause.)

Next is Isaac Harp. Yes. I was beginning to wonder, Mr. Harp. Thank you.

MR. HARP: I handed some copies of what I'm going to present today --

MS. WENZEL: I have them.

CHAIRPERSON BROMLEY: We have it. Thank you.

MR. HARP: Okay. I guess I wanted to start off with welcoming you all to Hawaii. I hope you're enjoying our beautiful island.

And a lot of people, even in Hawaii, are not

aware of the Hawaii Island chain extending an additional 1200 miles beyond the Main Hawaiian Island of Niihau, and that area is currently designated as a coral reef ecosystem reserve that was established in December of 2000.

I wrote the draft management plan that led to that designation. My wife introduced President Clinton for the announcement of that reserve, and it's currently an 84 million acre marine protected area. And I hope you take a look at the executive orders that established that reserve and, if possible, use that as a role model for why the marine protected area should be.

I have a lot of bullet points here in the handout that I passed out, and I'd like to point out that the principal purpose of the reserve is long-term conservation and protection of the reef ecosystem and related marine resources and species in their natural character. I think that "natural character" is a very powerful word because that takes us back to the ecosystem. Nothing can exist in its natural character unless the ecosystem itself is intact.

And all of the activities in the reserve are subject to the precautionary approach. When there is

a lack of scientific data or information, precautionary approach must be applied towards allowing or considering any type of activity in the area.

An area that is also special to the Native Hawaiians and we have been allowed cultural subsistence and religious access to that area. I'm very happy the Federal Government saw fit to provide access to the Native Hawaiian community.

Since we've been -- I guess we lost just about everything we have here in Hawaii since 1893's unlawful displacement of our government.

And in the reserve, there's no new recreational and commercial activities that can be allowed other than what existed during the time of the establishment of the reserve, so that kind of puts a safeguard on future expansion of anything up there. We have a safeguard in place.

The area is currently under a sanctuary designation process, and we're trusting that the Department of Commerce will not weaken the established reserve protections.

In the Executive Order, it states that any sanctuary must complement or supplement what we have

in the reserve, and I hope that means to increase protections rather than decrease.

And we also have permanently closed reserve preservation areas. These are permanently closed areas, there are several of them, and those are not open to commercial extraction or recreational extraction or any type of activity or even Native Hawaiian subsistence uses.

This is probably the most-attended process that ever occurred in Hawaii as far as the marine environment goes. There was a total of 31 public hearing and visioning sessions over a period of four years, and there were more than 94,000 written comments calling for the strongest possible protection of that area.

The State of Hawaii later came out with a proposal for the state waters, which is from the shoreline to three miles, as you probably all know, and that initial proposal was for creating a fishery management area. And the public came out strongly opposed to that designation, so the state went back to the drawing board and now they're coming out with a marine refuge designation proposal, which has strong public support.

And they also have a "do no harm" clause in their language, which I'm very happy with.

There's a Reserve Advisory Council that was developed, similar to the Sanctuary Advisory Council in the Humpback Whale Sanctuary and other sanctuaries around the United States.

And they have come out with a statement that they believe the best thing to protect the reserve is to bring the place to the people rather than bring the people to the place. Human intrusion into any area will, of course, upset the natural character of anything. It doesn't matter if you step in the corals or anything like that; just the human presence there as a foreign being will disrupt that natural balance so that they would need to consider creating marine protected areas and actually keeping human beings out of there so it can exist in its natural character as much as possible.

And finally, Congressman Ed Case strongly supported the concept of no commercial use in the area, and he also supports a buyout of existing small boat deep sea bottomfish fishery. There's only nine boats left participating in that fishery, and as a commercial fisherman myself, when I went to draft my

plan, I grandfathered that in because I know the economics alone will drive them out of business eventually. So there's a few guys still participating and they're struggling along. A lot of them are losing money -- actually, they all report loss of income participating in the fishery, but they're hanging in. They're hoping for some kind of buyout program, which I hope occurs so that they can get into some other kind of business. A lot of them want to continue working in the area, but there's not much fish to be caught up there, and I hope that they can get involved with marine debris cleanup or some other projects up in that area.

The second sheet on the handout that I've passed around is an excerpt from a science study on the ocean surface currents here in the Hawaiian Archipelago. And this shows that we have a unique counter-current in Hawaii that flows from the western Hawaiian Island direction back towards the Main Hawaiian Islands.

And because our islands, the populated islands, have been so depleted of the marine resources here, this, to me, says that the Northwestern Hawaiian Islands could be an insurance policy for future

replenishment of the populated area if we keep that area -- maintain the healthy status of the area.

And that's about all I have. If you have any questions, I'll be glad to answer them.

CHAIRPERSON BROMLEY: Thank you very much.

(Applause.)

We are butting up now against a time constraint, so I will take questions, but I must ask that they be brief and that the answer be brief.

Who had his hand up? Michael and then Tony.

DR. CRUICKSHANK: Thank you, Mr. Chairman. Interesting concept you have there. Bringing the place to the people, how do you propose to do that?

MR. HARP: There's quite an extensive education campaign going around right now. There's a website and presentations on different islands and things that have underwater photographs and different education on the ecology of coral reefs and things like that. So educating the people will not only helping to protect that area by keeping the people out but help to protect the area where we have the populated islands so people are aware of not going out there or dumping oil into storm drains or things like that, so it's quite an extensive education campaign

that's being carried out by the National Oceans Service.

DR. CRUICKSHANK: Thank you. Does that include a museum also?

MR. HARP: Excuse me?

DR. CRUICKSHANK: Does that include a museum or aquarium or something like that?

MR. HARP: I didn't really understand.

DR. CRUICKSHANK: Oh, would that include a museum or an aquarium or something like that?

MR. HARP: Yes. We do have a museum that -- I don't know if you'd call it a museum, but it's an education center that was established on the Island of Hawaii, and they're hoping to expand that if funding becomes available to each of the islands.

DR. CRUICKSHANK: Thank you.

MR. HARP: Thank you.

CHAIRPERSON BROMLEY: Tony.

DR. CHATWIN: Thank you very much for your presentation. I just have a question for clarification. On the handout you distributed, it says -- second line down says "MPAs should set sights on a low goal to allow room for innovative conservation possibilities." And I wonder if you

could explain the thoughts behind that?

MR. HARP: Well, yes. Most of the marine protected areas that I know of allow human access, and I think that's what the low goal is. I really don't want to see any kind of language come out of this process that might block more than what is typical. Something like the Northwestern Hawaiian Islands, if you create any language that may undermine some of those protections up there, that's one thing I really don't want.

But the low goal, I think, is what we have now -- pretty much allows human access, tourism activities and things like that. And Northwestern Hawaiian Islands plays a very key role in our tourism industry which generates about $800 annually a year. Our green sea turtles are probably one of the main attractions here in the main Hawaiian Islands, and over 90 percent of the green sea turtles spawn and nest in the Northwestern Hawaiian Islands and migrate back to the Main Hawaiian Islands to feed where those tourists can see them.

CHAIRPERSON BROMLEY: Wonderful.

DR. CHATWIN: Thank you.

CHAIRPERSON BROMLEY: Thank you very much.

MR. HARP: Thank you.

CHAIRPERSON BROMLEY: Okay. Our next speaker is --

(Applause.)

CHAIRPERSON BROMLEY: -- Tammy Harp.

MS. HARP: Aloha, everyone. Welcome to Maui. My name is Tammy Harp. My major concern is the Northwestern Hawaiian Islands. We need strong, long-lasting protection up there. I think we've learned enough by now about what happened to us in the Main Hawaiian Islands and our resources due to poor past planning, management, and etcetera, etcetera And I think that place should be protected and seriously protected.

I don't support any commercialism up there except for Midway, being that it has the infrastructure. I do not support destructive research practices that occur up there every now and then when there is scientific research being done whether on mammals or, you know, the coral reefs or whatever you have. But there is destructive things going on up there.

Same like down here, but it's much more important up there to protect. It's just -- I cannot

express to you folks how important it is in this day and age, we try and correct things that was done from before and we're losing and I cannot -- I just -- I'm sorry, but I just have to stick to the Northwestern Hawaiian Islands because that is the other half of Hawaii which is considered, like Isaac coined the phrase, "our kupuna islands," which is the elders.

And as we're not -- like we're next to the Big Island and the Big Island being the youngest and now we have Luihi, which is not even being born yet; it's conceived. But, in any sense, I wanted to let you folks know that there is a deep ocean cutter that is being built and should be ready, supposedly ready by 2006. And this has been on my mind since I saw the article of it, and I really feel that Midway deserves that.

Commercialism shouldn't be given to private entities to take care of. I mean, you can have on the commercialism that they had where people can fish and this and that, but to maintain the runway and the fuel, whatever you call those things that they have the fuel what? -- fuel dock -- yeah, the fuel dock, you know, with those big tanks and stuff, they should be manned by a Government entity. And I really feel

that the United States Coast Guard belongs there and this deep ocean cutter which is over 400 feet long, I'm sure going to be high-tech -- we're in the Central Pacific, we're not West, we're not East, we're Central. And Midway is Central. And that cutter, which is probably the first of its kind, should be up there and it should be manned and there should be a station there where they have actual people there. But then I still see that you can still have that commercial aspect there because of the infrastructure, but the fuel and the runway shouldn't be handled by those private entities, whoever they choose.

But, anyway, that's my full concern. I wanted you folks to know because here in Hawaii, our life is just built around the sun -- I mean, the sky and the sea and the land. And without those, we are nothing, you know. Perhaps you folks, too, but on a grander scale we just live on islands. I mean, there's even smaller islands where people are losing their lands. It's being inundated by what? By other people, which is shameful. You know, all these things happening around the world is because of what people had done before and this is our medicine. And so how many doctors do we need to see before we realize that

it takes us to correct things.

And sometimes it's strictness. Like us, we have this thing called akapu. You know, you're forbidden to do things, you know. But, anyway, I'm sure you folks heard about those things. But without those, you have no discipline, obedience. We're just like nothing because we have no order. And without rules and regulations up in the Northwestern Hawaiian Islands, I think that is one of the most foolish things, I cannot believe.

And we can't enforce anything. It's open game up there. And we have -- on top of that, I found out about this deep ocean cutter way before they're telling us that now Hawaii will be having United States Coast Guard gun boats. Now, why do we need gun boats? I think right now -- I think, if I'm not mistaken, there's two. I think we were supposed to have up to five. Why do we need gun boats?

But, anyway, as you can see, my mom -- my parents raised me to be -- to take what you need. And the old folks do -- they have -- it took people, not necessarily a village, it took a town, a district, to take care of a child and that's how fortunate we was. And I cannot express how -- I cannot understand how

people cannot see that you cannot keep taking without replenishing. You cannot replenish as fast as you're taking. Why can't people see that?

In 1994, there was documentaries, you know, "The Codfish -- 500 Years," Peter Jennings. And then "A Killing Tide," a CNN special. You know, those things -- and then "Hunt for the Bluefin." That time in -- I think was '97 or so -- we saw that they were allowed to take only ten. What is the amount now? How much can the fishermen take now? One, none, two, three?

But, anyway, that's what I'm meaning about the mentality. Everything is -- I don't know if it's greed. Is that my time?

CHAIRPERSON BROMLEY: Yes. I'm afraid so.

MS. HARP: Oh.

CHAIRPERSON BROMLEY: We're enjoying this very much. I'm sorry that the machine here is giving off these sounds. If you can wrap it up. We're very happy to have you here with us.

MS. HARP: I just want to thank you all for coming. As you can hear, I have -- because I talked about snorkeling and stuff, and those are examples of lessons we are supposed to learn by now and we haven't

and we've let money dictate everything and yet the struggle to get money to try to fix the problem, you know -- so and I thank you all in allowing me this chance to show my concern that the Northwestern Hawaiian Islands should be protected. It needs rules and regulations in place. There should be no more fisheries developed or continued -- well, minus the bottomfish, you know. They're grandfathered in and that's just how it is. But other than that, please help us fully protect it because it is not only one rainflower. It is one of -- there are many more out there and we're failing all of them.

Mahalo.

CHAIRPERSON BROMLEY: Mahalo.

(Applause.)

Thank you again. Okay. We had one -- Environmental Defense had hoped to be here, and the person hasn't shown up, so they may be submitting written testimony to us.

The last speaker then will be Ms. Athline Clark who is from the State of Hawaii.

MS. CLARK: Aloha kakahiaka, good morning. I'm here today to provide testimony on behalf of the State of Hawaii, Department of Land and Natural

Resources, and our Chairperson Peter Young. I'm also here because I wear a number of other hats, including the vice chair of the State MPA Advisory Group. And I'd like to provide you both a little bit of a national perspective initially and then mostly a local perspective.

I'm sure by now you've heard a little bit about the State MPA Advisory Group. We were formed by NOAA and the Coastal States Organization about two and a half years ago to provide input into the national inventory process and the proposed system of a national marine sanctuary -- proposed system of national marine sanctuaries.

We began meeting intermittently, first to discuss how to gather the data from all of the states to help be put into the national inventory that is underway. And, since then, to how we work with you as a federal advisory committee.

We had a conference call just last week to begin to better address how we better coordinate and communicate between the state and federal advisory committee and your group. We are excited about the opportunity to work with you and we are working with the MPA Center staff to formalize this communication.

So stay tuned; we're trying to figure out how we better work and coordinate and integrate.

Why is it important to include the states and territories in a discussion of the national system of MPAs? First, the estuaries, the essential fish habitats, nurseries, and other critical habitats that link the land to the sea are all within our jurisdiction.

Although the degree to which the MPAs exist in each state varies, it is critical to find the linkages that do exist between state-designated sites and opportunities to create adjacent federal-managed areas.

An example of where this has been brought to bear in the past in a coordinated approach is at Channel Islands in California. There are other examples elsewhere. There are also good examples of co-managed systems with the National Marine Sanctuary system here in two places and in the Florida Keys and in California.

Lastly, mechanisms that exist at the federal level to create protected areas in our experience are somewhat limited. And if you're truly going to create a national network, this is an issue that may need to

be addressed.

I'm going to turn to a slide show that I have that goes into some detail specifically about the State's Marine Protected Areas Program. I understand that you will be visiting one of our marine protected areas tomorrow over on Lana'i. I apologize. We had hoped to be able to have staff accompany you to provide information to you. But we have a handout instead because our staff are already all otherwise allocated.

This is a picture from the Northwestern Hawaiian Islands and is -- and, again, was a photograph obtained through a collaborative effort between us and National Marine Sanctuaries Program through the Northwestern Hawaiian Islands Reserve.

Next slide. Coral reefs play a strong cultural and social role in many of the Pacific Islands, including here in Hawaii. The corals were the first living organism in the Hawaiian Creation chant called the "kumulipo" to be the emerging organism out of the ocean and are recognized as a building block of all of our islands. To quote from my colleagues in the Pacific, "In some cases, our corals are our islands."

Next slide, please. You've heard of this concept already today, the concept of the ahupua'a or managing from the top of the mountains in pie-shaped pieces out to the edge of the reef. This is in fact the way that all of our watersheds were managed and have been managed for thousands of years in all the Pacific Islands is a watershed concept where everything was integrated between the top of the mountains to the edge of the reefs.

Next slide, please. You also heard about the concept of kapu. Marine protected areas are not a new idea in the Pacific. They've been around for thousands of years. In many of the villages -- and still, you'll hear more about this from my colleagues from the other Pacific Islands, it is the chiefs who make the decisions about setting an area aside for a period of time because it needs to be brought back or because there was potential damage to it or there was some fishing -- an extensive amount of fishing or -- this whole idea of setting areas aside and limiting the amount of take is something that has been an ongoing process throughout our islands for generations and generations.

Next slide, please. This current state

designation process is to select a site and, in most cases, almost all of our marine protected areas have been brought from the community up, so it's been a bottom-up approach in Hawaii for most of the sites that have been designated to date.

And we -- the community brings an idea to us, we do a basic assessment to determine the biological resources, we hold multiple meetings with the community to gain input and to work out a variety of acceptable management strategies. Those meetings can last anywhere from two years up to, in the longest time frame, we've had it happen is over ten years. Once the community recommendations are drafted into proposed regulations, they are taken to our Land Board for approval. Each place where you see an asterisk there is another opportunity for public input into the process.

After the Land Board approves it, it goes to the Attorney General's Office and the Governor's Office and then, from there, to hold public hearings.

Next slide, please. Public hearings are held on the proposed regulations and, again, depending upon the level of community support, the regulations are either finalized or revised and taken back out for a

second round of public hearings. You heard about that process for us already today with our Northwestern Hawaiian Islands proposal where we went in with one proposal, we heard resoundingly from the community that that wasn't what they wanted, and we've gone back out again for another set of proposals that the community now does accept.

Again, major opportunities for public input. The final rules, after all the public comments are put together, are put before the Board of Land and Natural Resources -- again, an opportunity for public comment and input -- and then approved by the Attorney Generals and the Governor.

The minimum amount of time that it takes from the initial proposed process to site designation and formalization is approximately three years -- long timeline.

Next slide. However, we're pretty proud of the fact that we've had marine protected areas in Hawaii now for over 35 years. We have 11 marine life conservation districts, we have 19 different types of fishery management areas, 18 bottomfish-restricted areas. This is just in the Main Hawaiian Islands now. One research reserve, a natural area reserve, the

Kahoolawe Island Reserve, the Hawaiian Islands Humpback Whale National Marine Sanctuary, which is a co-managed sanctuary between the state and the National Marine Sanctuary Program. The Hawaiian -- the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve, which does not currently include state waters, and the Northwestern Hawaiian Islands State Refuge, which is in final preparation for regulation and has gone through two rounds of public hearings.

Next, please. This is a slide of all the variety of marine protected areas that we have within the Main Hawaiian Islands. Just to give you some examples of what we have here, if you stand outside this courtyard here and look out to sea in front of you, you will be looking across waters that are part of the Hawaiian Islands Humpback Whale National Marine Sanctuary. You'll see a small, crescent-shaped island between here and Kahoolawe which is called Molokini, which is a marine protected area called Molokini Marine Life Conservation District, and you'll see the Kahoolawe Island Protected Areas, which is managed as a cultural protected site.

And hopefully at some point, you'll get more information about the whole process that they used in

which to designate that site.

Next slide, please. Hanauma Bay, probably one of our more famous/infamous, depending upon your view, of our marine protected areas has been around since 1967. It's 110 acres. It is the study, if you need one, on how to manage people or what happens when you love a place to death. At one point in time, we had over 10,000 people a day, three million people a year going to this site before the city and the state collectively stepped in to try to come up with a set of management regulations to limit the access to this site. We are now down to about a million a year. There's a mandatory education program, etc., etc., etc. I could go into a lot of detail just about this as a case study.

Next slide, please. We're looking at many changes to our marine protected area program right now. One of those is to do something that was similar to what's being discussed here, which is to develop a framework and a national -- that would be linked to the national system and similar to what California undertook a few years back. So we're in the process of developing a comprehensive framework and management plan for our marine protected areas and there are many

studies underway as a component of that.

We're also trying to link our current and proposed process with efforts underway both at the national and international levels. One of the cornerstones of what we do is to ensure public involvement. Probably got that already.

Next slide, please. To obtain the best available scientific data for our decisionmaking and to obtain where we can and how we can the historical and cultural data to consider the native cultural practices and the importance of cultural sites in any new areas that are proposed for designation.

Next slide, please. This is the Island of Hawaii. This is the west coast of the Island of Hawaii. There is marine protected areas along that entire coastline for 150 miles. What we did at this site and what we're in the process of doing along this coastline is we've got a five-year study that we've been doing with a before/after comparison between sites that were previously protected, sites that are open, and sites that were designated and are currently protected to do an assessment of effectiveness. We're in the process of finalizing those recommendations because the law that helped us set this place up

requires that we give a report on this to the Legislature this next year.

So come January, there will also be a significant report available on all of the data.

And we have 11 collaborative research projects that are ongoing as a component of this whole network assessment.

Next slide, please.

CHAIRPERSON BROMLEY: Sorry. Can you --

MS. CLARK: Two slides more.

CHAIRPERSON BROMLEY: Okay. Thank you.

MS. CLARK: The community participation recommendations you've already heard before, but I'd like to reiterate those to you. First, education is an essential element to gaining community support. Best-available science is a critical component to informed decision-making. A fully-engaged and informed community will become your advocates not only for the establishment of MPAs but also for resource management initiatives.

Next slide, please. Community-based processes will result in much greater compliance and assistance in the reporting of violations. We actually have community groups that are now working

with us along those lines. And we no longer have the staff or the financial resources to do an adequate job without this partnership.

I want to answer three questions that came up earlier today. We have the information as the state on the court case and we'll be happy to provide that to you.

CHAIRPERSON BROMLEY: That would be nice.

MS. CLARK: So that's one. The other is that if you have any additional questions about our marine protected area systems, I will be here all day and would look forward to talking to you about it.

And the last concept is one which will lead right into the next -- last slide, please -- to the next panel discussion, and this came as a quote from a Moloka'i fisherman, which is: "When we think about managing, looking at, protecting our ocean resources, we do so with reverence for our ancestors and our connections to our islands and our ecosystems with the wisdom that is passed down from our kupuna, or our elders, with the respect that needs to be shown to those resources before we take, and with the responsibility to pass on what we've learned to our children and our children's children."

Mahalo.

(Applause.)

CHAIRPERSON BROMLEY: Thank you very much. I very much regret we're on a tight time schedule. That was very nice.

Yes. One quick question, Mark, and a quicker answer.

DR. HIXON: Thanks, Athline. Actually, I don't need -- I'm not asking a question. I just wanted to bear witness to the West Hawaii Monitoring Program for those nine marine reserves, aquarium reserves on the Big Island. Is -- I'm familiar with that study and, in my mind, it's the most rigorous monitoring study ever of a set of marine reserves at true what's called BACI design -- Before/After Control/Impact -- so I just wanted to bear witness to that. Thank you.

MS. CLARK: Right. Washington and Oregon are co-partners with us on this study. Thanks, Mark.

CHAIRPERSON BROMLEY: Good. Thank you. Okay. I'm sorry to push us along. We have a very important panel presentation now and I'm going to turn it over to Terry O'Halloran.

MR. O'HALLORAN: Thank you, Mr. Chair. If I

could have the panelists come up forward here.

CHAIRPERSON BROMLEY: I think we're experiencing what happens when you don't build a break into the program. People take one anyway. So if you'll bear with us.

We are going to take a minute or two break while we get set up here.

(Recess from 9:17 a.m., until 9:24 a.m.)

MR. O'HALLORAN: Aloha. This morning, we've got a very -- I think a very good panel and it's going to be very interesting information for everyone. Our topic is the Pacific Island MPA Management, and we're very fortunate to have four speakers.

The first two will be speaking on incorporating tenets of traditional marine resource management. We have one speaker representing a user group perspective, primarily of ocean tourism, and a speaker on intergovernmental coordination.

Our first speaker this morning, Apelu Aitaota, his title is Magele. He's the high talking chief community liaison officer in the Department of Commerce in American Samoa.

He's with American Samoa Coastal Management. He's been in this position for ten years. And I

think, Apelu, we -- any time you're ready. Thank you.

MR. AITAOTO: (Begins in Hawaiian). I would say hello.

Thank you, Terry. Usually I am allotted two hours to speak as you all realize that I am a high talking chief. But I prepared 20 pages for my talk this morning but, unfortunately, someone took it at the airport.

The Samoan culture is based on one word: respect. I am not going to talk about the MPAs per se. I'll restrict my talk to the cultural setting.

Later on, I'll explain my traditional attire. This is the staff and this is the whiskers. I'm wearing the high talking chief's lei, as you call it in Hawaii. We have the gold there and a piece of tapa cloth. All these pieces combine to make up the traditional dress of the high talking chief.

The topic of my talk this morning is cultural fishing practices and it's about the Fagasa story, which is an event in one of the villages in American Samoa.

When we talk about culture, we are referring -- specifically referring to the pattern of development reflected in society's system of

knowledge, ideology, values, laws, and day-to-day ritual. Like any other Polynesian society in the Pacific, Samoans rely on narrative stories handed down from generation to generation by our forefathers in order to provide stability and understanding of the unknown.

In the past, Samoan gods were like great chiefs from far lands who visited among the people, entering their daily lives sometimes as humans or animals, sometimes taking residence in a stone or wooden idol. Ancient Samoans lived by the animalistic philosophy that living souls are assigned to animals, trees, stones, stars, and clouds, as well as humans.

Religion and mythology were interwoven in Samoan culture and local legends and genealogies were preserved in song, chants, and narrative stories.

As a result of one of these narrative stories, I would like to share with you an event which occurs in the village of Fagasa. This is applicable in the context of cultural ideology that was revived from the past and is practiced in this village.

Fagasa is a village on the northern coast of Tutuila, the main island of American Samoa. This village is considered privileged and blessed to be

able to harvest schools of akula or mackerel at any given time of the year due to the following village events:

One particular family (aiga o le ao) is tasked with being on the lookout for fish. There are certain acts of nature that provide the family with clues that lead up to the harvesting of the fish. These natural acts could be an increase of fishing activity on the surface of the ocean water within the inlets that separate the reefs. Another sure sign is the appearance of the dolphins swimming in the bay. This is interpreted as the gods steering the school of fish into the bay and eventually onto the reefs to be harvested.

Once these natural acts occur, the family is charged with the -- will let the villagers know that swimming, fishing, or any boating activities is restricted. This is to ensure that the school of fish is not frightened back into the open ocean. At this time also, the laws of nature take over and the large schools of jack trevally, barracuda, and sharks are attracted to the school of mackerel and they begin to feed on it. The feeding frenzy by the larger fish provides the mackerel with only one other option and

that is to move onto the reefs.

As soon as the school of fish is sighted on the reefs, the family in charge will initiate hollering "Eiiiiiii," a call that will last about four seconds -- was that four seconds? Okay -- in interval and that will precipitate the same action from any other chief to do the same. Within a span of two minutes, the whole village will have recognized the call. The call is similar to "Hey!" in English.

The women with their fish baskets and nets will quickly make their way to the beach with the children to await further instructions, while the young men of the village head towards the coconut groves and, under instructions from the titled men to cut the green coconut leaves for others underneath to drag to the beach.

While this is going on, a group of young chiefs will be making their way to each and every home to ensure that everyone is on the beach. The families are allowed only one individual to stay behind, usually a young maiden to tend to little children, elderly, and the sick.

At the beach, the young untitled men, with the instructions of the young chiefs, are tying the

green coconut leaves connected to form a long line of tied coconut leaves.

The family in charge or their high chief is constantly assessing the situation and the location of the school of fish on the reef. As soon as they are satisfied with the location, which is usually closer to shore, then the final preparations are made by the villagers. The tying of the leaves occur at two locations. When the school of fish moves onto the reef, the villagers are already preparing their leaves for harvest. The objective is for the two groups to be able to encircle the school of fish with the green coconut leaves to form a semi-circle that will become a barrier for the fish attempting any escape back into the deep, with shoreline providing the final wall to the trap.

Two of the swiftest and the tallest young men would lead the charge by making their way to each other to complete a semi-circle of green coconut leaves, and the villagers about a meter from each other closely behind the two young men to carry and hold the leaves in place.

The movement in the water is swift and as quiet as possible to minimize any detection of the

school of fish of what is going on. Once the circle is complete, then the family in charge will provide instructions to the villagers of whether to move forward or remain in place. Once the harvest is complete, all the leaves are gathered and stored on the seashore. A second sweep over the reef to gather all the loose leaves or pieces of the leaves is done to ensure that none of the debris is left floating in the water.

In conclusion, the point emphasized is the use of natural resources by the village to harvest thousands and thousands of mackerel for its consumption. The harvest is divided equally among the families and there are certain restrictions that are put in place to ensure that no one benefits financially from the catch and to ensure that overfishing doesn't occur. Families are allowed to share their portion with anyone or relatives from other villages, but they are prohibited to sell the fish. Considered as a gift from the gods, it is only fair that families gladly give their fish away without any monetary gain. With an abundance of fish to last a family for many days, this gives the family in charge the discretion of when to conduct the next

harvest so that none of the fish go to waste.

Attempts in the past by the village to use modern fishing nets rather than the green coconut leaves have resulted in very little or nil fish caught. There were also times when dynamite was used and the result was dead fish floating in the water for days and the destruction of corals. The village, with a lesson learned from the use of modern techniques or methods, decided to revert back to its cultural method of fishing, using its natural resources. As for the coconut trees, trimming allows the trees to grow stronger and the leaves are bigger, greener, and healthier. The reason why the young chiefs accompany the young men when cutting the leaves is to ensure that the coconut tree is not trimmed to the point where it will eventually die. So it's a win-win situation for the reefs, the coconut trees, and the whole village.

The significance of this story is that cultural practices embody sustainable yields with acceptable approaches to the resource used for the good of all. To my fellow islanders and everybody here today, in your planning and implementation of programs, I urge you to consider the importance of

culture, cultural practices, and the ideology when developing education, bridging science to policy, and management regimes.

We need to create models of culturally sensitive programs to address the issues and the impacts on our island environments and urge those present today to move together using some of our cultural elements with the endeavor to protecting our coastal and ocean resources for those generations following us.

No matter where you live in the world, whether it's in the continental United States, an island in the Caribbean, or the Pacific, always remember when making decisions and deliberations and strategies, that we are all inhabitants of the ocean. After all, it is not only my home, but it's our home in the ocean.

Soifua.

(Applause.)

Usually when high talking chief's done, he goes back to his village, which is exactly what I'm about to do. But -- no, no, Terry. I'm not leaving. As I said, our culture is based on respect and I respect the facility's instruction for me to stay here

until the end of the day.

But I'd like to -- in order for our -- Mr. Chairman and members of the committee and everyone here, to remember I'm going to present -- and I ask the Chairman to please rise as I present -- part of my culture to you to remember us by. And on the same token, I'd like to invite the committee, if possible, for your next meeting to take place in Samoa where you would be able to experience for yourself our culture in action.

The staff is a symbol of stability and direction, and I present you, Mr. Chairman, with the staff.

The whisker is a symbol of the traditional wisdom which has guided our people from the ages past, and I also would like to present this to you. This is an awa bowl. Some islands in the Pacific call it cawa and some call it awa -- awa bowl. The awa bowl is a symbol of our unity. The lid of the awa bowl represents the various positions within a meeting house of the Samoan people during the council of peace gathering or a special meeting. And when we sit together, we discuss and we solve problems. Of course, we have many, many problems, but this is our

way of working problems. We sit down and we talk amongst ourselves. We share ideas and also a symbol of our community as a whole, that everyone -- every individual in Samoa has a bowl from birth to the time when they move on to happier hunting grounds. And I'd like to present you the awa bowl.

And, finally, I was supposed to wear this today, but the tapa maker made a mistake and gave me the piece of tapa which did go right around me. And also I was afraid that I would be charged with indecent exposure. I also would like to give you this.

CHAIRPERSON BROMLEY: Thank you.

MR. AITAOTO: And, with that, I now pronounce you Chairman of this Committee.

(Applause.)

CHAIRPERSON BROMLEY: I'm humbled by your generosity, your graciousness, and I accept your gifts on behalf of my colleagues with honor and reverence. And I will now see if after all of this, I get any more respect from them. I doubt very much that that will happen. I'd like to visit with you afterwards to find out how you deal with people when they don't give you the proper respect that you've come to expect. So

could we have a little chat afterwards maybe?

Thank you. Thank you.

MR. O'HALLORAN: (Speaks in native tongue).

Our next speaker comes from Palau, Noah Idechong. He's a member of Palau's 6th National Congress where he carries the Committee on Resources and Development. Prior to joining the Congress, Noah spent six years as the founding Executive Director for the Palau Conservation Society, a non-profit NGO involved environmental work in Palau and helping the communities establish protected areas.

Noah also worked with the Palau government for 15 years to promote development of aquaculture, fisheries programs, and administration and management. In this capacity, he oversaw research and management and development of legislation. He spent five years as the head of the Palau Marine Resources Division, so our next speaker is Noah Idechong.

MR. IDECHONG: (Speaks in native tongue). Thank you very much, Terry, and good morning to everyone. It's great to be here in Maui. It's my first time here. It took me one night and one day to fly here, but it's great to be with you.

My topic this morning, as stated, is about the cultural elements that we can use for the development of MPAs. I will speak a little bit about Micronesia, where I do my work, but mostly I will give an example of what we did in Palau to develop the marine protected areas.

In Micronesia, we have various islands, various island types -- islands, atolls, and along with those we have mangroves, rivers, and so many different types of habitats where people have begun to depend heavily on marine resources.

Just to show you the bulls-eye of coral diversity,as you can see right between the Philippines and Indonesia, along that area, and you can see Micronesia right there close to it where we have a lot of coral diversity. Just an example, in Palau we have 1300 species of fish and 700 species of corals. That's the highest of corals.

And Micronesians have developed high dependency on the reefs for subsistence and cultural uses and training grounds for their young sons. And, today, they've turned that into mainly a tourist attraction where people are using it to earn income, not just for selling fish but now beginning to use

tourism to see the same fish over and over.

Just a bit of a roundup on the Micronesians. Some of the key cultural elements which they've used as a result of being in close association with the reefs for many, many years, thousands of years in fact, Micronesians have developed an extensive way of dealing with the resource management issues and uses. So just a little bit of roundup.

In Yap -- Yap Islands is perhaps the most traditional of all Micronesian islands. Actually, the marine tenure in Yap goes all the way to the reefs, so you own a reef just like you own land and especially the chiefs. You cannot go and harvest anywhere unless you get permission from the chiefs and owners.

On the island of Ponape, if you don't speak the high language -- that's the language that's reserved for the chiefs -- if you don't speak that language, you have no access to be dealing with the chiefs or to get permission or to have meetings. So it's quite a different way. There's constraints but a lot of opportunities to go along with that.

In Ponape, we are learning a lot from the watershed uses and management, and they've developed a good way of dealing with issues which we are all

learning from Micronesia.

In Kosrae, as a result of whalers landing in Kosrae, population went down to just over 300 people, and so they lost all elements of cultural practices, so the church is now the thing that the population is using. So anything to do with resource management has to be dealt with at the church. Kosrae has a really beautiful forest. It's permanently a forest. I haven't seen it anywhere in the world, but it's a great, beautiful forest that's still intact in Kosrae.

Move on to Chuuk. Actually, Chuuk never got united, so its head of the families is really responsible for his family members and so you have so many different people but you have to deal with heads of families. They never went as far as uniting into chief system. So currently, that's the way it is when we're dealing with the cultural part.

Just the Marshall Islands has a really extensive reefs and islands that are refuges for turtles in other areas. And just recently, they turned their -- the islands -- the grant aid program from Japan has moved from fisheries and harvesting into more management, so that's something new in

Micronesia.

I just want to give you a very small example of Palau where we used our traditional way of Bul, and it's Bul with one "l," actually. So in Palau, back in the '80s, we faced such difficulties with dynamiting, poaching, and overfishing, as well as the overinvestment in fisheries infrastructure from the Japanese grant aid where icemaking machines and large boats were spread all around the island to catch more fish.

But in the '80s, there was hardly anywhere to sell the fish because demand was low. The airplanes in those days were only three times a week, so we had a lot of excess catch which was being dumped, and there were a lot of ships that were complaining that everybody was fishing in their waters.

So as part of the Marine Resource Program, we realized that we couldn't handle it, so we had to turn to the fishermen for solutions.

In the days that followed and the years that followed, rather than try to give the fishermen and the communities solutions, we asked them for their solutions that we could help them with. We began to

look at the areas, and we began to look at how the areas might be used for other than selling the fish. We began to look at the tourist potential.

We also looked for ways in which they might be able to provide guidance for the government programs and, in fact, it was in doing those meetings that we realized that perhaps using this thousands of year tradition of Bul -- Bul is pretty much similar to what you have here as the kapu. And we also mobilized the students, the whole community, so not just working with the chiefs. We went out and talked with everyone and we figured out what they wanted to do. We got involved in all kinds of activities that relate to education, just to get people involved in some activities and to provide them with the information that they will need to decide what was possible to do.

In that process, we established the Bul areas that later became the protected areas. So from the Bul, that started as a kapu area that ranged from a year to three years in duration, and having people watching them very carefully, they were convinced that that was the way to go, and we were contemplating putting those into legislation.

Then in 1998, we had a big bleaching in

Palau where we had warm water remaining in Palau for many months and, in some areas, nearly a hundred percent of the staghorn corals were killed by the warm water. In other areas, about 30 percent. So with that bleaching, Palau became aware that we cannot just protect our corals ourselves. We have to ask for some help because this is a job that required perhaps a little bit more than what the local knowledge was able to accommodate.

So there was a more openness to bring the scientists and others into the picture.

In that effort, from the first Bul that we enacted in 1994, presently we have about 20 protected areas. Some include the watershed areas, but mainly marine, and they range in size from one square mile to about 20 square miles of areas. They also have different uses. Some are very strictand completely ban entries. Others are like quarter state rock islands where you have users but, at the same time, there are zones and areas that are off limits to fishing and many things.

Because we've developed from the communities such a number of protected areas, we began to figure out how we put those into some form of

system. And last year, in November, we enacted a law called the Protected Area Network Act. That act provides the recognition from the national government to recognize those protected areas that have been initiated by the communities, recognize them by law.

So the Protected Area Network Act actually established the formal system for all of these areas. And it's no longer just marine; it's also terrestrial areas. And it also recognized that the communities are owners and are managers of those and it provides the support, monetary support as well as technical assistance, from the national government and hopefully other areas.

It also welcomes the partnership from others and one of the things that we put in the law is to make sure that we take into account all the lessons that we learned from the bleaching event, such as taking into account the current and making sure that whatever final decision would incorporate the resilience concept.

One thing I'd like to say about that is that the current status of that is we've hired the coordinator for the area. It recognizes the national government becomes the coordinator of the network.

This is the Ministry of National Resources. But the management remains within the communities.

We've hired the coordinator of the network. We're looking into getting an advisor, a marine advisor that will be finalizing the criteria and the final design and then trying to incorporate this into and capture all the protected areas that have been established in Palau.

One of the things I can say is that, in looking at it very quickly, the protected area actually provides the community need for full security, and that's where it really started. But, overall, just looking at it quickly, we think that it will satisfy the goals of the national government, its biodiversity goals and objectives, and will also contribute to our obligations for our treaties.

So just looking at the future for Palau and Micronesia, I think it's pretty positive. I think people are very open to the local input, plus they realize that we need partners, we need scientists to help us with the big picture.

One thing that has been very strong in Micronesia is the regional cooperation, and we have developed quite a number of mechanisms for that

cooperation. We currently have MAREPAC. MAREPAC is the Marine Resource Pacific Consortium, which I chair, and this is a consortium of NGOs, institutions of higher education, as well as resource managers.

We have also MIC. This is Micronesians In Conservation, which is a network group that helps build the capacity for managers.

We also have PAIRS, which is an institution of higher education that's trying to expand learning at the community college level.

We have the APIL, which is the Association of Pacific Island Legislatures, which meets on a regular basis to look at legislation across Micronesia.

We have the President's Summit, which is now twice a year for the Marshall Islands, FSM, and Palau to share issues and solutions on the environment and particularly to bring non-government organizations, the Palau Conservation Society, and just following that in Ponape, we have the Conservation Society of Ponape, which is doing an excellent job in the watershed management in Ponape.

And we've added, of course, international NGOs, the Nature Conservancy.

And AIMS is a new partner. There's a study going on in Palau right now to look at the current that's funded by the Nature Conservancy, AIMS, and NOAA. In October, they'll be showing their results. There will be a meeting in Palau to show results on the water temperature throughout Palau.

There are challenges, of course, in the islands. There are very few people and so it's hard to have enough expertise to go around, so we've resorted to sharing of those. We're slow to adopt the information and technology that's coming online. That's pretty tough to do. We're at the very low end of getting the new information.

Our governments, again, are a throwback to the trust territory governments, and we haven't really made that transition from the issues and the governing system. We have not modernized the system, especially in Palau, so we're still faced with a weak structure of the governance system that needs to be strengthened.

Again, local communities and communication are still not very strong when it deals with this new information that comes in, so it's not being shared all across as well as we want.

So that's the end of my presentation. I'd be happy to answer any questions, Mr. Chairman.

(Applause.)

MR. O'HALLORAN: I think, if we don't mind, we'll let the rest of the speakers give their presentation. Then we'll open it up to questions and then answers.

Thank you, Noah. Very good presentation.

We're going to shift gears now in this panel to a user perspective. And to present the user perspective is Jim Coon. Captain Jim Coon is the owner of Trilogy Excursions, and he's the CEO of the family business that's the oldest sailboat business in Maui, begun in 1973, and, actually, Jim comes from a long line or heritage of seagoing family.

And I've known Jim for a long time. He's been very involved in Hawaii for -- well, I won't tell you for how long he's been involved in marine conservation efforts in Hawaii, but let's just suffice it to say a very long time.

Among other things, he is the chair of the Humpback Whale National Marine Sanctuary Advisory Committee. He's also the president of the Ocean Tourism Coalition and is going to speak to us from his

user perspective. Jim.

MR. COON: Thank you, Jerry. I appreciate that. And it's an honor to be able to speak in front of a group of people of your persuasion and expertise, and I would like to give you -- I hope I can do justice to give you a user perspective.

And I'm going to take one section from President Clinton's Executive Order and I'm going to focus -- since I can only pick sort of one topic, this is going to be the topic. He says, "One of the goals is to establish a framework for facilitating recreation and tourism in the Northwest Hawaiian Islands consistent with the protection and sustainable management of the ecosystem."

And I'd like to make an argument how ocean tourism businesses using professional naturalist guides provide recreation and tourist access to certain marine protected areas in Hawaii consistent with the protection and sustainable management of the ecosystem and how the community-based small businesses that provide this access also need a stable and sustainable management model to survive.

Terry alluded to my family history, and I'm going to just refer to that because our family

went from extractive to non-extractive use in my lifetime. The Coon family has been in America for 350 years plus and just some highlights:

In 1843, Captain James Coon is on the Montano. It's anchored on a Lahaina roadstead with the rest of the whaling fleet. It's been out of New Bedford for 18 months. He's got 400 barrels of oil aboard. When the weather -- when the season changes, he'll move on to the Sea of Japan.

Nineteen-twenty-seven. My dad and his brother go to Alaska to seek their fortune. The Gold Rush has only been over a few years. They get in the charter boat business. There's only two things that people charter boats for at that time in Alaska: you want to fish or you want to do some big game hunting, mainly brown bear.

Nineteen-fifty-seven. It was my first year as a commercial fisherman. I fished the Gulf of Alaska for three months. Hated to come back to school. I told my dad, I said, Why have I got to go to school? I'm gonna be a fisherman. He said, Son, I'm worried that by the time you get to be my age, there might not be any fish left. And just, you know, get an education. At least you've got something to

fall back on.

I graduated with a degree in biology, having put my way through school as a commercial fisherman. Nineteen-sixty-nine. My dad sunk his charter boat. That was the family business. It was a tough break for dad. He had been able over those years to develop about a third of his business into what today we would call ecotourism, but it wasn't enough for his business to survive. He still depended heavily on big game hunting and sportfishing.

My brother and I came together with dad to build a boat to get him back in the charter business, which we did. It took us two years. We world-cruised it for two years and ended up here in Hawaii. And we were looking for a venue where we could go into non-consumptive, non-extractive tourism still running charter boats.

Nineteen-sevety-three. We started Trilogy Excursions going to the island of Lana'i for day trips, and our family had made that transition from extractive to non-extractive use and we've been doing that ever since.

I might mention that in 1988, Coonba,

which is sort of the name of our parent company, celebrated a hundred years of being in business, my brother and I being the third generation of keeping this family business going.

And it's our vision to operate a profitable company that's environmentally proactive and still incorporates the Hawaiian values which make it so important to our island way of life.

In the early years, before marine protected areas, when we first got here, the ocean tourism industry was largely unregulated or self-regulated, at best. Most of the popular boat trips were sportfishing, glass-bottom boats, and booze cruises. In fact, when we started, some of the major booking entities wouldn't book our trip because we didn't have an open bar. They said, “Who'd go on a boat if you don't have an open bar?” And so ecotourism was really in the infancy here.

There was just widespread extractive use and misuse of the near-shore and ocean environment. Anchoring in the coral was common. In fact, the typical anchor was a piece of rebar bent with a cross-piece welded on it and you threw it into the coral and it stuck in a piece of coral and held your boat. A

lot of just indiscriminate harvesting of different marine life.

I remember once a boat came over to Hulapui Bay and in a weekend cleaned out the slay pencil urchins. It has taken over 30 years for those to finally start just getting back to the level that they were -- I guess they were making wind chimes out of them or something. But, you know, just to see how quickly a resource can be depleted and how long it takes to come back.

There was overfishing, illegal fishing, bleaching, lots of different techniques that may have even been illegal at the time but were still commonly practiced.

The marine protected areas and commercial boating regulation arrived on Maui at about the same time, the late '70s, early '80s, and this caused some profound changes in our industry. First of all, the commercial activity was capped at the current level of boats at that time. There were no-take zones in marine protected areas. There were limits to vessel access in certain marine protected areas. The government started getting major revenue from commercial use to keep the costs low for the other

harbor users. Businesses were allowed to incorporate with normal business rights and given the same reasonable expectation of permit renewal on an annual basis as was enjoyed by the private slipholder.

Marine protected areas became branded and a must-see visitor destination through vigorous promotion by our industry. There was an explosive growth in fish population and use of the marine protected areas. Then questions started coming up about carrying capacity and anchoring, the way we were anchoring, and issues of day-use moorings came up, fish feeding in marine protected areas.

So today some of those issues have been dealt with. We've got a mature and stable ocean tourism industry, and I believe we're moving towards a more sustainable stewardship model. Companies are investing in the future, protecting the environment, realizing that without a pristine environment, they don't have a business. They're supporting day-use moorings, buying better equipment. They're giving better training to their staff and solid career paths for employees. And stable companies provide better products and better experience for the guests.

Now, it's interesting to note that the

commercial boats in Hawaii represent less than three percent of the boats in Hawaii and they employ a little over 2,000 people. The DLNR, as I mentioned, does depend on commercial fees to cover a lot of the costs of running the boating program, and the ocean tourism industry -- one of the gentlemen mentioned a tax hell -- well, we're in a lower level of tax hell. We actually pay an additional fee on top of the others that help support this. And, actually, that's not done with -- we don't grumble about that. We feel that's an appropriate thing to do.

Our modern vessels are costing over a million dollars now to construct. They're virtually all bank-financed. Very few companies could do this without bank financing.

I'd like to just offer a little perspective on extractive versus non-extractive use. Forty years ago, there was quite a significant local near-shore fisheries and Lahaina used to see just pretty significant catches coming in 30 years ago. And our industry was in its infancy then.

Thirty years later, the ocean tourism industry is close to a $200 million industry in Hawaii and we've seen the decline happen in near-shore

fisheries. It's a significant decline.

We see collaborative commercial use developing where 41 companies share only 25 moorings at Molakini Marine Preserve.

We're seeing more partnerships with free-standing non-profits to train and educate and protect our environment, and we feel that this is a model that makes so much sense because it gives the non-profit a much broader base and a much greater audience that they can present their message to, and it's one of the real win-wins that I'd like to see just happen more in the industry.

There's starting to finally be a lot more integration of Hawaiian values in our businesses, in our way we're looking at managing our businesses and our environment.

And one of the -- a friend shared this thought with me about the three C's. He said you can think of the environment like a three-legged stool, and the environment maybe would be the seat or the stool itself and it's got three legs -- culture, commerce, and community -- and those three things have to be in balance. If one of them gets out of balance, the stool falls over. And that was a good metaphor

for me just to think about that.

We believe that community-based businesses provide the best sustainable base for responsible use of the marine protected areas.

What's the future of ocean tourism in the marine protected areas? Well, I believe that the ocean tourism industry would support more marine protected areas. I think there does need to be carrying capacities established that are based on good science. There needs to be an expansion of day-use moorings on a statewide basis.

I think we should look at artificial reef development. Dr. Craig McDonald wrote a brilliant paper on this a few years ago that he was working for the state.

We need to be working in partnership with the various regulatory agencies, not as adversaries.

And Hawaii's ocean policy appears to be changing, which causes some uncertainty and instability in the ocean tourism industry. For example, recent Board of Land and Natural Resource Guidelines promoting use hierarchy, which puts the unregulated general public ahead of permitted commercial operator, and we feel that this model is

flawed and will not achieve the long-term goals for marine protected areas.

Permitted commercial access may be the best model to access marine protected areas for all the reasons that I've already mentioned.

There's also serious discussion about completely changing the current permit renewal process. So with the government process in flux, it just puts a lot of uncertainty in the industry. There's businesses that have real fears that they will not be able to keep investing in their business and keep their family business alive and maintain their companies, attract outside capital, or pass it on to the next generation.

And the banks are also concerned and we're seeing a definite tightening up in the lending from the banks.

Ultimately, individuals are not going to invest the huge amount of money and time necessary to do all the right things if there isn't some reasonable expectation that they're going to survive for the long haul.

The continued stability of the ocean tourism industry is vital for the long-term success of

the marine protected areas. Basic business rights and reasonable expectation of permit renewal are essential. Many operators have been in business for 20 years or more and they've got a generation of employees that have come into these companies with the hope and the expectation that they can grow in these companies, eventually be owning and running them, and we believe that a well-educated user group provides enlightened cooperative protection for the resource.

Also, a great marine protected area experience on the part of the visitor translates into strong political support, both on the local level and the national level.

We're a part of a global economy. In the world tourism market, the ocean tourism industry must provide a world-class product at a world-competitive price in one of the most highly-regulated environments on the planet and one of the highest cost environments on the planet, and that's just a global economy reality for us.

We would like to see ocean tourism industries continuing the private funding of resources, working with non-profits, and we see that as a model moving forward and being fully functional,

where education and research is supported more and more by private funds. We'd like to see a park ranger model of resource presence and enforcement.

We surely want to see the Hawaiian knowledge and values integrated into the industry and workforces well-trained in the stewardship model, with apprenticeship programs and career tracks in this field.

Constant improvement and commitment to the environment by well-informed and well-run local companies. And we believe that mature companies continue to grow in environmental awareness and invest in the long-term stewardship of the resource.

In summary, there are marine protected areas that require boats and expertise to safely access. It's recognized by many resource managers that regulated ocean tourism businesses provide the best mechanism to provide this access for the vast majority of the public while protecting the rights of the self-guided public. These permitted companies with well-trained staff have a track record for safety and responsible actions within the environment.

The Government also recognizes that these small companies make a significant contribution to the

local economies, of which they're an integral part, as well as providing funding to administrate and manage the resource. These companies will not continue to invest in the future of their businesses and these resources without a reasonable expectation that if they operate responsibly and obey the laws, they'll be granted continued commercial access permits.

Again, the main issue is to balance resource protection with safe public access, which is often provided almost exclusively by permitted commercial operators with many years of experience and a deep commitment to preserving the environment that provides their livelihoods.

Thank you.

(Applause.)

MR. O'HALLORAN: Thank you, Jim. Our next speaker will be talking about intergovernmental coordination. Dan Palawski works for the U.S. Fish & Wildlife Service in Honolulu. He's the Refuge Manager for the Pacific Remote Islands National Wildlife Refuge Complex. The refuge complex is comprised of nine national wildlife refuges located in the Central Pacific Ocean.

One of the refuges he manages is in the

State of Hawaii, one is in American Samoa. The other seven are all U.S. island possessions and their associated territorial sea.

So, Dan.

MR. PALAWSKI: Thank you, Mr. Chair, and thank you, Committee Members. I'd like to start off by recognizing and acknowledging some colleagues in the audience, and I notice that Athline Clark had left the room, but we collaborate very closely on issues out here in the Pacific.

I see Allen Tom back there who heads our sanctuary programs in the Pacific. And Alani Wilhelm in the room who is the acting manager for the Northwest Hawaiian Islands Coral Reef Ecosystem Reserve. So I have a lot of territory to cover in a short period of time, so I would encourage Committee members to interact with those folks. They also have a lot of knowledge about things happening here in the islands.

With that said, I want to cover basically four areas in my presentation. I want to go over the jurisdictions. I also want to talk about agency cooperation on education and outreach. I'd like to talk a little bit about agency cooperation on research

and monitoring. And then I would like a little bit to talk about agency cooperation on management.

Now, you've heard about governmental jurisdictions in the EEZ, and Roy did a very nice job yesterday of presenting this. There are -- it's the State of Hawaii, American Samoa, Commonwealth of Northern Mariana Islands, and Guam.

Now, what has been not mentioned very much -- and I didn't see Charlie's initial presentation -- is the U.S. island possessions and the surrounding territorial seas. And the fact is that Baker Island, Jarvis Island, Howland Island, Kingman Reef, Palmyra Atoll, Midway Atoll are all national wildlife refuges and they have a boundary in the marine environment. So this is our unique aspect of refuges here in the Pacific.

A couple footnotes: Johnston Atoll is a national wildlife refuge. It was created as a refuge in 1926. In 1934, administrative jurisdiction and control was transferred to the Navy and it's been under the administration of the Department of Defense ever since. And then also Wake Atoll is under the jurisdiction of the Air Force. Both of those areas have three-nautical-mile defensive seas around them,

so basically those are no-take marine protected areas, by default.

So this is just a visual that Roy showed yesterday. I learned something from Roy. Forty-five percent of the EEZ is out here in the Pacific. Actually, zones are separated by hundreds of miles. So when you start to think about a network of MPAs, what are you going to do in this vast area?

Next. In addition to the U.S. areas, there are some areas that have a special jurisdictional relationship with the U.S. Government and those are the Marshall Islands, the Federated States of Micronesia, and Palau, and this is by public law. There's a compact of free association that there's a special relationship between the U.S. and these countries and, for instance, the Fish & Wildlife Service has an MOU with the Marshall Islands to provide technical assistance on natural resource issues when requested and if we have the money to do it.

But this is an area that I think this Commission needs to be aware of and opportunities that might exist in terms of networking.

And then, in addition -- Lelei has

mentioned this on several occasions -- about all of the other South Pacific Island nations that exist out here in the Pacific and the Southeast Asian nations out here in the Pacific and then the continent of Australia -- I want to illustrate this with a map. It might be a little busy -- but I want to do something here just for -- Lelei made several comments -- this is where American Samoa is. So look at the all the countries around American Samoa where we could be involved in helping those countries in terms of MPAs. Up here, Baker Island, Howland Island are next to -- Palmyra and Kingman, here in Hawaiian Islands -- so there's a connection, international connections out here in the Pacific that I think are important.

Next. So I know that people from Alaska like to put that overlay of Alaska on the U.S. I like to put this overlay of the continental United States on our Pacific Ocean. We have a vast area to manage here.

Next. Now, this is -- these topics have been brought up many times, and I want to go through them because I think they're really essential, and that is that these areas are ancient, carrying a long history in their rocks. They have been previously

protected by their remoteness and inaccessibility. But they can serve as havens for many depleted and unique species. They also serve as a natural laboratory for large marine ecosystem management for an area straddling the equator and many latitudes. And they support some of the oldest, wettest, and driest atolls, islets, and associated habitats on the planet.

Next. Now, I want to talk a little bit about -- there's a lot of interest in the Northwest Hawaiian Islands, and there are many agencies and individuals involved, and we can -- I guess maybe I'll do this in kind of a chronology aspect.

As has been mentioned, these islands were founded by Native Hawaiians many, many years ago. Nihoa, there's signs that there were habitation on Nihoa maybe for as long as 400 years, so Necker or Makawanamanu also has many Native Hawaiian and cultural sites on it.

Then in 1909, the Hawaiian Islands National Wildlife Refuge was established. The State of Hawaii received statehood in 1959, so we have state waters, zero to three miles.

Also in the early 1960s, Kure Atoll, the

last atoll, was provided to the state and it is a wildlife sanctuary, a state wildlife sanctuary.

Then in 1973, we had the Endangered Species Act. As a result of that, the turtle -- the Pacific green sea turtle and the Hawaiian monk seal are listed species, so there's coordination with the National Marine Fishery Service Protected Species Program. There's critical habitat on the refuge. And then we have the Magnuson Act in 1976, the creation of the Western Pacific Fishery Council.

Then in 1996, the Navy transferred Midway Atoll to the U.S. Fish and Wildlife Service, so we now have the Midway Atoll National Wildlife Refuge.

And then in 2001, we had, by Executive Order, the creation of the Northwest Hawaiian Islands Coral Reef Ecosystem Reserve.

And now in 2004, as Athline has mentioned, the state is proposing a marine refuge in the Northwest Hawaiian Islands. So even though they're remote, there's a lot of coordination that needs to be done to manage this area.

And we -- we, I think, again, we talked a little bit about large marine ecosystem management. And we have an opportunity here in Hawaiian

Archipelago to work at that. It's going to be not an easy job, but I think it has potential and we need to pursue that.

Now, let me move on and just give you some examples -- I'm going to go into education and outreach, just an example of that. Then I'll talk about research, an example of that, and then management.

So back to cooperative education and outreach, this is truly a bottom-up effort, an effort called Navigating Change. It was actually inspired by the Polynesian Voyaging Society, a non-profit organization, and the agencies have gotten on board and support this vision -- and it's a shared vision by the Hawaii Department of Education, Fish and Wildlife Service, Hawaii Department of Land and Natural Resources, National Oceans Service, Bishop Museum, University of Hawaii, and Navigating Change focuses on the Northwest Hawaiian Islands as a catalyst for change to occur in our own communities. This is how we bring the islands back to the people and -- rather than people going to the islands.

And so -- next slide, please. This effort is centered around the voyaging canoe Hokolea. This

canoe is very famous in the Islands. It was a canoe that basically traversed using traditional navigational techniques -- navigating by the stars, navigating by the currents, by the winds, by the biology, by what the birds are doing, and -- in the 1970s, and it caused a rejuvenation of Native Hawaiian culture.

And the agencies have gotten on board. The master navigator of this canoe, Nainoah Thompson, made a trip up to the Northwest Hawaiian Islands and he was amazed at the resources up in the Northwest Hawaiian Islands, the baseline. He experienced a changing baseline -- what he knew here in the Main Hawaiian Islands versus what was up in the Northwest Hawaiian Islands in terms of resources.

And so the agencies got together, developed a curriculum, and -- fourth and fifth graders -- and -- Athline mentioned this -- we teach the three R's but they're a little different than what you think about traditionally. It is reverence, respect, and responsibility for taking care of the land and water in the Northwest Hawaiian Islands and in the Main Hawaiian Islands, for that matter.

We had one leg in the cultural aspect, but

there was a very unique Western leg of this in that the canoe was equipped with satellite communication equipment and we had live communication from the canoe back to classrooms and kids could ask questions of the resources that they were seeing up in the Northwest Hawaiian Islands, and this went all the way to the Mainland. There was a parish in Louisiana that was experiencing what it was like to be in the Northwest Hawaiian Islands -- very -- I think a very good way to educate fourth and fifth graders and actually educate ourselves at the same time.

Now, I want to move on but I want to mention one other adult education project that is underway and I want to compliment the Western Pacific Fishery Management Council. They've taken the lead in organizing a scientific symposium that's going to occur in November and it will bring together scientists that have done work in the Northwest Hawaiian Islands since the late '80s. The last time we had a symposium like this was in the late '80s. So we're going to have all the researchers come together and start to -- peer-reviewed research and a proceedings that will be -- come out and the agencies are co-sponsors in this effort.

So -- but in the last five years, there has been an increase in inventory and monitoring in the Northwest Hawaiian Islands and it's something we call NWHIRAMP and it's the Northwest Hawaiian Islands Reef Assessment and Monitoring Program, and it is truly a collaborative effort. We use the NOAA National Marine Fishery Service Lab here. When these surveys were done in 2001, the NOAA vessel Townsend Cromwell was used. That vessel has been retired but there are two new NOAA vessels out here that are platforms for doing inventory and monitoring.

And the state contributed their biologists, we contributed some biologists, because we've learned that this job is bigger than any one agency. We need to work together to protect these islands.

So -- next one. I know there's been a lot of talk about fish in the last couple of days, so I'm going to just talk about coral. I could talk about a lot of things, but I'll talk about coral. And we use multiple techniques to assess and monitor coral populations. We use something called rapid ecological assessment, and this is a way to look at what the coral habitat is -- or corals are doing, what the fish

are doing around the corals, inverts, algae -- it's a real rapid assessment technique. Then the National Marine Fishery Service does toad diver habitat surveys. We have reproduction and recruitment surveys. We have permanent transects or permanent stations in the refuge for monitoring coral. And then we have coral coring. This happened to be a special case in 2001, coral coring growth and disease, but the State of Hawaii now has a coral disease expert. As we speak, there's a research vessel up in the Northwest Hawaiian Islands doing this very work, so it's an ongoing inventory and monitoring effort.

Now, what does that data show us? What can we take from that data? And a little biogeography of coral species richness, and this is from them. As was mentioned, there's a high endemism in the Northwest Hawaiian Islands, but species richness is relatively low, but when we take these trips, we find new things. We found 12 new species of coral in Northwest Hawaiian Islands that are not found in the Main Hawaiian Islands. We find new species of algae. It's still a place that there's a lot of work and learning to be done.

One interesting thing on this map here is

that the Johnston Island has some spectacular table coral beds, and that's about 450 miles south of Turren Island or French Frigate Shoals, and we find these table corals at French Frigate Shoals and Northwest Hawaiian Islands. But we don't see them at islands southeast of French Frigate Shoals or islands northeast of French Frigate Shoals, so we also need to do physical oceanography to look at how this -- if there is a connection.

Next slide, please. Now we've expanded this, again, all in collaborative efforts with all the partners, and we've looked at other places in the Pacific.

And so if you look -- and there was a slide earlier -- the general thinking is that species diversity increases from east to west when you go across along the equator, but really a unique feature at Kingman Reef National Wildlife Refuge and Palmyra Atoll Natural Wildlife Refuge is you have something called the north equatorial counter-current. And so if you look on this map, you see that there's three times the number of species at Palmyra Atoll and Kingman Reef, just a short distance away from Jarvis Island. So, very unique situations out here in the

Pacific.

Next slide, please. I have to show one nice coral photo. This is the coral gardens at Johnston Island -- I mean, sorry -- Jarvis Island National Wildlife Refuge. Could show similar photos at Palmyra, Kingman, Baker, Howland, Jarvis. There's just some spectacular coral environments and ecosystems at these places.

Next, please. Which leads me into resource protection and management. And, as I mentioned, I think there are opportunities out here in the Pacific to do large ecosystem -- marine ecosystem management. We're just taking baby steps now and we're probably children in trying to learn how to do this, but I think there are opportunities for figuring out how to do it.

Now, during the course of the Commission's deliberations here, I've heard the terms "co-management" and "coordinated management" come up, and I can speak to that a little bit from strictly a jurisdictional perspective. As Athline mentioned earlier, the state is proposing rules and regulations for marine -- a state marine refuge in the Northwest Hawaiian Islands. Those rules and regulations pretty

much mirror the rules and regulations related to the Northwest Hawaiian Islands -- I'm sorry -- the Hawaiian Islands National Wildlife Refuge.

In that case, we can do co-management. We can work together. If the sanctuary and also the -- now, when we talk about coordinated management, the National Wildlife Refuge System Administration Act is the law by which the Fish and Wildlife Service manages national wildlife refuges. And I understand NOAA has another law, National Marine Sanctuary Act. There is a pretty -- there is a difference in how that starts out. And the difference is under the National Wildlife Refuge System Administration Act, uses at a place are closed until the Fish and Wildlife Service determines to open that use and that use only can be opened if it's compatible with the purposes for which the refuge was established.

So on the flip side, if I understand the sanctuary law, the sanctuary law, things are opened until you close them. And so there's potential for conflict there between these two laws and that's something that we would probably need to work out. But there's also potential for coordinated management and zoning and so it comes back to, here in Hawaii,

respecting jurisdictions and what we do and how we do it.

Now -- I'm sorry. One more thing on small no-take marine protected areas, which I'm going to talk about here. When you think about these remote island refuges, compared to the total EEZ or compared to the total Pacific, they're really like a pea on an eight-lane highway in terms of amount of area that they cover. But they have tremendous sinks of biological resources at these spots. And so when you think -- next slide, please -- when you think about starting a network of MPAs and how you put that together, you could say that -- you could use the National Wildlife Refuge system model here as a starter. There are ten of these remote refuges in the Pacific, cover a wide range of latitudes. But -- and I need to talk to -- and I'm curious about how the Commission might respond to this, or this Committee -- these areas are closed and are -- the purpose is protection and conservation. And I heard the subcommittee yesterday say that in order for something to be a marine protected area, it has to have sustainable use. And in that case, these refuges probably don't qualify as MPAs, and hopefully we can

get some clarification on that and make sure it's really clear.

So let me close by saying I'll have some recommendations for the Pacific Region. I need to caveat this -- that I'm glad to hear that the Committee is talking about bottom-up because in the Fish and Wildlife hierarchy, I'm at the bottom. I'm the bottom and I manage these nine places, and so these are recommendations of the Pacific Island Refuge Manager, not necessarily the Director of the Fish and Wildlife Service.

But I think it's important to promote recognition by the U.S. and other jurisdictions of the immense importance of using MPAs in the Pacific to protect the world's biodiversity; conduct additional scientific surveys to promote large marine ecosystem management; recognize that while there are key geographic areas in the Pacific for which scientific knowledge may be limited, such areas still need to be protected as soon as possible for the benefit of future generations -- next, okay; provide adequate support for management capacity and freely communicate the best conservation practices through educational initiatives; regularly monitor MPAs with sufficient

intensity to ensure perpetual natural resource protection in the Pacific region; and include cultural experts in the decision-making to identify potential MPA sites and assist in their management.

Thank you very much. Again, I'm glad to hear that the Committee is thinking about -- thinking globally but acting locally. Thank you.

(Applause.)

MR. O'HALLORAN: Thank you, Dan. Okay. I'd like to open it up for questions. Okay. Wally.

DR. PEREYRA: Thank you. I don't -- I can't speak for the MPA Center and their filtering mechanisms on MPAs, but I do believe that that -- that those would fit into the marine reserve no-take category, so I think you'd be covered. But the question I have is: Back in the -- I believe it was back in the '70s, before the enactment of the Magnuson Act, there was a fairly robust commercial fishery, a Japanese and Soviet fishery, in the Northwest Hawaiian Islands, particularly in the French Frigate Shoal area.

And I believe they were fishing for boar fish, if I'm not mistaken. And knowing what I know about the pulse nature of their fisheries during those

periods, I would imagine they did a pretty good, thorough job of depleting those resources. And I am wondering two things:

First, do you have signs of recovery of those resources that were fished at that time? And, secondly, what has been the lasting impact that those fisheries had on the -- you know, on the coral areas? You mentioned that the table coral was missing in certain areas to the northeast, I believe, and southwest of the -- or northwest and southeast of --

MR. PALAWSKI: On the coral issue, I don't think it's a function of any type of fishery impact.

DR. PEREYRA: Okay.

MR. PALAWSKI: I'm not too familiar with the fisheries that occurred in the '70s. That's where Athline will be able to help me out eventually. Maybe if she wants to make any comment on that now. But certainly there has been recovery in some of those areas. There are some tremendous fish stocks and assessments -- or assemblages of fish in that area.

And I think the thing there, though, to take note on is that there also was a commercial fishery for black pearl oysters at Pearl & Hermes Reef in 1920 and, in that case, that didn't come back,

hasn't come back yet. So I think you have to think about -- you can say that maybe you could take one thing out and it doesn't affect the other, but I think that's still an area that needs to be explored, I think.

DR. PEREYRA: Thank you very much.

MR. PALAWSKI: Athline, do you want to mention anything there? Okay.

MR. O'HALLORAN: Okay. We have Rod.

DR. FUJITA: Thanks, Terry. Thanks to the panel for those excellent presentations. My interpretation of Subcommittee 1's recommendation is that, you know, a refuge that's been in place for at least ten years would be an MPA. It doesn't -- a particular MPA doesn't have to have all three uses -- cultural resources, sustainable production, and natural heritage. It can be limited to one. Others can be multiple use -- my understanding.

I also have a question for Noah. Noah, congratulations on your new network law in Palau. And I'm wondering if you can provide us with some advice on -- well, are there mechanisms in the law for looking for gaps in the network and for -- how do new MPAs get into the system?

MR. IDECHONG: Actually, the law provides a framework, but it provides the design of the -- gives about -- an opportunity for designing the MPAs, the new ones as well as the -- so it's sort of trying to capture what's already in existence. At the same time, allowing for new ones. So it's pretty open and it's -- we have sort of a year and a half time frame to work on the final criterias and the standards and all the rules and regulations that goes with it. So it should be pretty open.

MR. O'HALLORAN: Okay. Thank you, Noah. Mel.

MR. MOON: Yeah. I had a question about the issue in regards to the wildlife refuge and the standard, I guess, that you had quoted about it was closed to all takes. Does that also include subsistence and gathering and cultural removals as well?

MR. PALAWSKI: Here in Hawaii, that is the case, that there is not a provision right now for Native Hawaiians under federal law to use these refuges for subsistence.

MR. MOON: Are there other avenues for being able to have dialogue about providing for those

needs, or has it never been raised in this area?

MR. PALAWSKI: It's a gathering issue. And I think as we talk our way through how we're going to work together, there has been a cultural trip to Nihoa and we worked very closely with the Native Hawaiian community, and the outcome of that trip was that they also saw this area as being unique in the sense that they landed on Nihoa Island and they actually stayed a night, only eight, and they represented each island in the Main Hawaiian Islands to make their offering at Nihoa. And I kept telling them, you know, It's different. It's different. You're gonna see all these birds that you never thought you would ever see. And we had shearwaters bombarding them at night.

And after that experience, they realized that this is a special place, that we -- they -- everyone needs to take care of how we are going to deal with it. And they also I think recognized that, as has been mentioned, the Northwest Hawaiian Islands might be the place to protect and with the goal of restoring other areas in Hawaii for subsistence use.

And so I think it's a continuing dialogue that will occur for a long time to come and we're at

the very early stages of that.

MR. O'HALLORAN: Tony.

DR. CHATWIN: Thank you, Terry. Thank you to all the presenters. I found the presentations very interesting. A question I have is to Noah. And in your presentation, you mentioned that one of the principles that you want to incorporate into the network of marine protected areas is the principle of resilience. And I think it would be helpful for the committee to hear a bit more about why that's a principle that you have embraced and maybe a bit how you plan -- it's being planned.

MR. IDECHONG: Thanks for the question. I think the idea of resilience really came out after the bleaching event in 1998 where we looked at the area. One of the scientists that was with us, Rod Song, was based in Honolulu from the Nature Conservancy. We looked at areas that were bleached throughout Palau and some of the areas that were not bleached were very unique. We couldn't really figure out what they were. But some areas, like river mouths and certain areas within the reef, were not bleached. And then just next to it, areas were heavily impacted. And then just following that, we were looking at how the

recovery might happen and areas that were recovering very quickly and areas that were not recovering very quickly, that just couldn't recover at all.

And we sort of linked that to several factors. Current, strong current would be one. Areas that have already been perhaps subject to a lot of stresses and areas that may have deep ocean current that comes through, as well as seasonal strength of the current.

So with those, we figured that perhaps we need to look beyond just the present boundaries. We need to look for resilient factors that might impact the -- might help us design the protected areas to become more resilient, so taking into account all the major factors and big currents and others that might contribute to more robust MPAs for the future.

So recognizing that, we put that in the law so that we could have the -- whatever science that's needed, whatever support that might look into those to either reposition the MPAs or network them into bigger pictures.

So that's the idea and we put that in the law just to make sure that's captured.

DR. CHATWIN: I'm from the Nature

Conservancy, but I think it's very -- it's laudable that you followed down that path because that is -- in essence, it's linked to adaptive management that we are discussing here and the idea that we need to preserve some flexibility in how we design networks, so thank you.

MR. O'HALLORAN: Thank you. Bob.

MR. ZALES: Yeah. I do -- I appreciate everybody's presentation. It was very informative for me. My question is gonna be for Mr. Coons. And as a fellow person in the for-hire sector like yourself and being involved in so much over the years, you mentioned about the different commercial licenses and things like that that you have and I've had discussions with Roy about some of this stuff. But is there any kind of limited entry type thing in your vessels here in Hawaii? Or has that been discussed? And it's not that I'm promoting this, but I'm -- as a realist, and in the Gulf of Mexico we now have a limited access charter vessel permit that was implemented here several months ago and it was because of the reasons of limited access to fish. But, obviously, we're getting to the point to where it's going to be limited access for things to see and play

with.

So has that been discussed and are there organizations here in Hawaii, for-hire organizations, charter or dive or sailing or anything like that, where you all discussed this or --

MR. COON: Actually, yes. Twenty years ago, the state of Hawaii strictly limited the number of commercial vessels actually operating statewide. And that number has not been -- the actual numbers of vessels has been pretty much frozen from that time. There is not -- they actually set some numbers. For example, Lahaina, when they put the freeze in at Lahaina, there were something like 66 businesses altogether that were operating there. That has attrited down to 42 at the moment out of Lahaina Harbor. So -- and their goal long-term, for example at Lahaina, would be to let it continue to attrit over time till maybe there was thirty something.

MR. O'HALLORAN: Okay. Thank you. Lelei.

MR. PEAU: Thank you, Terry. I'd like to ask a question to High Chief Magele, if you can come to the podium. But this is also to enforce -- terms of the regional networking of MPAs, but also the -- the spirit of collaborations and sharing of

information.

What I want to ask High Chief Magele, if he can speak on the relationship and how the two Samoas are able, Independent Samoa and the U.S. territory, are able to collaborate on their efforts in terms of sharing some of the information that are able to come to the table and discuss issues pertaining to, again, MPA for example, the -- the community fisheries project that's undertaken by American Samoa but also is with collaboration with the Independent Samoa. If you could speak in how that -- how that project was able to be successful, given that they're two separate governments.

MR. AITAOTO: I said I was not going to talk about any MPAs, but thank you for the question. Samoa is one people but under a different -- two different form of governments. Our neighboring cousins in Western Samoa, also known as Samoa as an independent state, and we in American Samoa.

We have three kinds of MPAs. One is federal, which consists of the Rose Island Wildlife Refuge, the National Park Service, and the Fonateli Bay National Marine Sanctuary. I believe we have Nancy Dashbeck with us this morning -- well, I saw her

this morning.

And then -- so we have the federal. The territorial, which consists of the Bangle Harbor, the two mangrove lagoons, Nuule and Laone. And then we have the community-based fisheries program. And the -- it's very successful because we believe that -- the Samonas believe that we own right from the tip of the mountain right down to the edge of the reef, but then we have the -- the American system which is now in place. So with the population growth and the improvement in transportation, we're able to visit frequently one place to another where -- and, as a result, preserving and conserving the reefs or the marine areas is nothing new. As I said, Samoa is already designated and we have our own boundaries right from the beginning, so it's easier for any program introduced into our government because we have already have a mechanism in place in which if we can work together, it will be very easy because it's very difficult to follow protocol.

On the other hand, we find that the depletion of our -- the marine species is because our neighboring cousins are selling their -- they are coming over and they are taking most of the fish. So

we've -- they've come up with this -- with this idea and there are now 11 villages which have volunteered to work with the Department of Marine and Wildlife resources in this program of community-based fisheries. And the -- our -- Western Samoans have found that it's going to be for their benefit to sit down together and have a look at this and see how it has improved.

We have, like I said before, many years of a culture that is already designated and destined in that we have our own boundaries, like it's -- the sea right next adjacent to the land off the village that is known as property. This is the cultural perspective.

And you cannot take anything out of there.

As to the MPAs, the federal -- like the national parks, the Fonateli Bay Marine Sanctuary, there is no-take in those zones except for subsistence. The local people are allowed to take whatever they need in order for -- for them to -- for consumption.

Does that answer the question?

MR. PEAU: Thank you, Chief.

MR. AITAOTO: Thank you.

MR. O'HALLORAN: Thank you. Bob Bendick, did you have a question?

MR. BENDICK: I pass.

MR. O'HALLORAN: Okay. Dolly.

DR. GARZA: Thank you. I guess I'd like to follow up with your question, Lelei, and also to the Chief. I very much appreciate your presentation. One of the things I've been struggling with over the last few days is the word of "co-management" and community involvement, local participation, and how you reach a level of commitment and responsibility so that locals do sit at the table and say, Yes, I will be involved with this and I will abide by it.

And in listening to your presentation and following on Lelei's question of, okay, you have two Samoas and they're getting down to work together and it's this governmental but, on the same side or the other side is your position, as a very important fisherman, as a chief, how is your voice being heard in that status as a chief? Or do you represent a non-profit or a different organization that allows you to sit there? Or does the Samoan government recognize your tribal position as a co-management voice at the

table? Does that make sense as a question?

MR. AITAOTO: When they decided -- when Department of Marine and Wildlife Resources decided that they were -- they had public awareness programs first. And then they started to inform the public through the village councils, and that's when they -- the village councils themselves volunteered to be part of this effort. So the government, it was very easy that way for the government to work together to co-manage the fisheries project.

As I said, we're used to seasonal fishing and rotational cropping, so it's not that difficult to work with us in that way because when the government -- they work in partnership with the village councils and then they leave the program -- the enforcement portion of the project to the village councils to take care of. So the government is there like represented by the agencies as technical staff, which the council can ask, you know, questions which for the technical people. But as far as the enforcement and looking after and making sure that it's gonna be there, that's the village councils' responsibility and everyone in the village, for that matter.

Did I answer your question?

DR. GARZA: Could I also ask that question of Noah for Micronesia area?

MR. IDECHONG: Yes. I think in the case of Palau, I think we start at the community level first and we work our way up. We started as a Bul, which was enacted by the chiefs and the communities. Later, we found that it was -- Bul itself was not enough and there was a response to use local law to mirror that Bul. And then much recently, as I said last year, on the national legislation, protected area network would put them into sort of a network, but keep in mind that is -- we don't call it a national system. We're looking at it as a nationwide system but it's really locally managed areas.

MR. O'HALLORAN: Okay. Bob Zales.

MR. ZALES: Yeah. And I hate to pick on Mr. Coon again, but I've got another question for you. When you mentioned artificial reefs, and I'm certain we're on the same page on this because I'm a big advocate of artificial reefs. We have a good program in the Gulf of Mexico -- when you talk about artificial reefs here, from my knowledge of it, a lot of these things are fads, I guess, the things that they put in deep water and float, which I kind of

like, but some of them, I guess, you may be talking about some reefs to help not really replace natural stuff but to work in conjunction with the natural reefs that are out there to try to enhance the resource and provide material for the different corals and fishes and whatever it took to gather on -- to help.

Could you explain to me a little bit more how your artificial reef program works here and that type of thing?

MR. COON: Well, specifically, I'm looking at an artificial reef that would be primarily an incubator for fish stock that could then migrate to the near-shore reefs and, very importantly, take pressure off the reefs that are much easier accessible by land and so it would serve several purposes: One, to reduce the pressure on the closer-to-shore reefs; secondly, to be a fish propagator; thirdly, as a significant economic enhancer for the charter boat industry that, rather than utilizing the close -- the more accessible reefs and putting pressure on them, it would diversity that out to other areas where at the moment there's maybe little or no activity happening.

MR. ZALES: Just as a follow-up, have you

all considered, because we've discussed this in the Gulf and in some other areas, have you all considered maybe an area like you're talking about where there's not much use now by anybody? Because we've kind of laid out a concept that we're -- because, obviously, user conflict comes into play in a lot of management materials today. But if you had an area that you could take and you could place an artificial reef where there's essentially no activity and kind of establish that as a, say, no-take zone but, I mean, because in that respect, then you don't affect anybody. Nobody uses it to begin with. But it does exactly what you're saying it should do. It would help enhance the resource and be able to nurture the other things around there.

Have you all considered anything like that or proposed anything like that in any agency?

MR. COON: Actually, we're in the process of doing that as we speak. We've had limited success on that and there's a lot of permitting issues. Jim Walsh could actually speak to that even more appropriately. He's been working aggressively on -- we have an old whaling ship, the Carthoginian, that is -- we're preparing that to become an artificial reef

instead of just bringing it out, taking it out 12 miles offshore and scuttling it, we're going to sink it in more near-shore waters so that it still has a life in our community.

MR. ZALES: Thank you.

MR. O'HALLORAN: Okay. Thank you. Bonnie.

VICE CHAIRPERSON McCAY: Thank you, everyone, for very, very instructive discussions. I have lots of questions and I'll just ask one question and that has to do with the ways in which in these programs that you've described, the community-based programs, have you been able to address in the incorporation of the special -- the local knowledge of and the traditional knowledge of the local people and communicating that knowledge to the two governments? -- managers as well as to scientists? What kind of exchange of information is taking place in those programs?

MR. IDECHONG: Thank you for the question. I think for the marine protected areas in Palau that start at the community level, they were actually all based on local knowledge and traditional knowledge, so that's where they started. But we realized that the

local knowledge were only able to accommodate the local area where the fishermen had access to, and they weren't really -- couldn't connect with the big picture of Palau as well as the global influences. So actually that's where it started, and they're beginning to drive the way that Palau works on cautionary approach. And I think the absence -- and that's where we recognize the need for resilience ideas and the science -- is that while we have the local knowledge, that was not enough and we had to incorporate science in the big picture into it. So, actually, it started with local knowledge but now we need the science to go along with that.

MR. O'HALLORAN: Okay.

MR. AITAOTO: We have in American Samoa what we call a local government, the Office of Samoan Affairs. And whatever government agencies plan to -- especially when you're dealing with public awareness -- we go through the Office of Samoan Affairs and then -- before we approach the village or the NGOs in the villages and that's how -- but as far as the knowledge, most, if not all, the people who are employed by the government are Samoans and I don't see any reason for them to be given the traditional and

cultural knowledge. But they always ask the -- they always have to go through the Office of Samoan Affairs and then Samoan Affairs deal with the village council. But they have people who are there ready to help out with the public awareness programs.

MR. O'HALLORAN: Okay. Thank you. Gil.

MR. RADONSKI: My question's to Noah or maybe a comment that I'd like him to expand on. When you talked about the bleaching event of 1998, you said that the local people looked at it and when they reached their level of understanding and didn't have enough answers, they turned to scientists.

I don't think we see many scientists turning to local people for the same type of information. This is not something that has a great deal of reciprocity. And I'd like for you to comment on that. Have many scientists come to you and asked for local knowledge?

MR. IDECHONG: Yes. Nineteen ninety-eight was a very interesting time for Palau because when the bleaching started, all the soft corals turned really beautiful. It looks like you're in a candy store. It's blue, purple, red, all kind of colors. And then all of a sudden, it started dying. Corals

turned white and the reefs started oozing all these nasty things. In the beautiful corals, when you look at it, it sparkles. So when you go from the boat, you see that it kind of reflects light. But when it died, it just takes out the light. When you see it, it's just -- looks like you're looking into a cave and that's how it looked.

And Palauans were really affected. It really shook their confidence about the way they knew about the corals and reefs and things like that, so it was a very scary time in Palau. And, in fact, some people said, Why should we care for it now that we -- you know, we have no control?

And that was a risky time. We had to tell them that, “Look, you know, maybe it's time to really tighten our belt and really become -- we have resolved to do this because we don't understand what it is.”

And never in the memory of any elder Palauans did the reef turn into that situation. And so it was interesting time for a little bit after that. We gathered all the scientists, everyone together, and we had no answer. And so, unfortunately, again the science didn't have the answer, but at least there is some way of knowing that

maybe we don't know the answer and, therefore, we should be more cautious about our approach and that's -- to me, that's the level we are now.

The only comfort with that is the -- with assistance from Nature Conservancy and NOAA and AIMS, that they've been looking into the current, that maybe we'll understand how we'll be better prepared for the next event if there is to happen. So it was a wake-up call for us. And I think it destroyed our reef, but at least it gave us a way to go forward.

MR. RADONSKI: Thank you.

MR. O'HALLORAN: Bonnie.

VICE CHAIRPERSON McCAY: May I follow up on my original question and Gil's question and this discussion. I'm wondering: Is there the development of a greater respect for the ability of local communities to be engaged in marine resource management? Is there also -- I mean, does what follows include not only an appreciation on the part of the scientific community of local knowledge but also the engagement of local people in research and participatory research?

MR. PEAU: That's a really good point that Bonnie raised. One other thing that I notice from my

perspective, the disconnect between science and management. In our experience, we receive a lot of support from the federal agencies and two problems. One, when they come down and do research, they leave without -- well, first they come in without the locals aware of their schedule. I think there's been improvement on that.

But, secondly, we try to -- we put a requirement that if any research scientists come down to the territory, they are required to give a public report speaking to the local community in terms of the results of their report.

And, thirdly, the finding of the reports itself. Oftentimes when they're done, that's the end of it. We never hear them back. That's one of the disconnects, and I'd like to see more interaction. I think it requires both scientific and also the customary -- the traditional involvement, but we need to find a way that those two needs to marry so that there's more collaboration and share of information and share of knowledge and experience.

Only that, then we can see a major difference in how we can progress forward in terms of our efforts in terms of sharing the knowledge and

information.

MR. O'HALLORAN: Thank you, Lelei. And, yes, Noah, would you like to respond?

MR. IDECHONG: Can I just comment on that because I think that's really important point. In our case, in Palau when we work with the communities, we would never allow people to come and work without meeting with the communities themselves. So whenever we work -- the people who provide us with help will come to the communities, show their faces, they get to know who they are so they really understand the situation before they move forward.

And I think one thing that at least up to this point that's never been taken away from Palauans is that the responsibility is theirs. It's never been taken; the responsibility has always been there and the attention and the knowledge is there to help with that responsibility. And every scientist that's come to work with us contributes to that responsibility rather than taking away the responsibility and the attention, and I think that has been the one measure that whatever work that comes to Palau will go and supplement or complement the knowledge that's already there and the responsibility remains with the local

people. As long as we don't take that away, I think that will remain to be working.

MR. O'HALLORAN: Thank you, Noah. I think that these comments go along with some of the discussions we've been having that the importance to keep the local knowledge involved in an MPA throughout the process and all the way through the monitoring and evaluation of effectiveness; I mean, that's part of the melding of research results with local knowledge.

We've got Mark Hixon and then we'll get to you, Michael.

DR. HIXON: Thank you, Terry. Just a brief point of information regarding the relationship between coral bleaching and MPAs. There's increasing evidence that coral bleaching is directly linked to human-induced global warming. While global warming cannot be ameliorated by marine protected areas at all, there are cases where it's believed that synergies between global warming and local stressors could mean -- that cause coral bleaching -- could mean that marine protected areas could help provide a buffer against bleaching in those situations.

Thank you.

MR. O'HALLORAN: Okay. Michael.

DR. CRUICKSHANK: Thank you, Terry. I just wanted to add to this question that was raised shortly about the local people asking the scientists. I was a scientist at University of Hawaii for a number of years. We were asked several times to go to Kiabass (phonetic) and to Marshall Islands to work on a project there dealing with the coastal supply of sand for the uses locally. So during all that time, the local people were very much involved with what we were doing and we, of course, reported back to them in full.

So there definitely is an interchange between both ways. We were very pleased with that. Thank you.

MR. O'HALLORAN: Good. Good point. Well -- okay. I think this will probably be the last question. Eric.

MR. GILMAN: Thanks, Terry.

MR. O'HALLORAN: Good timing.

MR. GILMAN: I'd like to pose a question to Don. During your presentation, you highlighted a number of collaborative and cooperative arrangements between different agencies, both federal and state, within the refuge system. I was wondering if you

could briefly identify a jurisdictional dispute that occurs in the Pacific Island Refuge Network that may have national significance.

MR. PALAWSKI: That's a loaded question, Eric. Well, let me just say -- and be careful how I word -- well, the Western Pacific Fishery Council developed a coral reef ecosystem fishery management plan that proposes some limited take marine protected areas that are inside refuge boundaries. We've worked with NOAA, especially NOAA Regional Office. We have an agreement that National Marine Fishery Service will not permit any fishing within a national wildlife refuge unless expressly authorized by the Fish & Wildlife Service.

And that's where it currently stands. There's still more discussion that needs to be done. The Fish & Wildlife Service is still working at publishing regulations and what the boundaries are of these refuges and we're going to continue to pursue that so that the public knows what the rules are, and that's really important that the public know what the rules are.

MR. O'HALLORAN: Thank you. I just want to say mahalo to our panelists. I think it was --

it's been very good and we really appreciate your time and your expertise here. So, mahalo, and I'm going to turn this back over to our Chairman. Thank you.

(Applause.)

CHAIRPERSON BROMLEY: Thank you very much. And we'll take just a second here in case you want to rearrange yourself. You're welcome to stay there if you'd like, but.

In light of the new power bestowed upon me by Chief Aitaoto as high talking chief, I'm happy to grab back the control of the program. If any of you object to my usurpation of power, I'd ask you to talk to Lelei. He's -- I've deputized him to enforce things here.

Seriously, we now enter the period where the subcommittees are going to meet. I was going to ask Lauren to point you in the right direction, but I think I have an algorithm here that will do it. We've -- you've met in two rooms. You know where the other groups have met. So I assume that each of you can figure out the room in which you have not yet met and that's where you're supposed to go right now.

One more announcement. I would like the Executive Committee, consisting of the chairs and the

vice chairs of the three subcommittees and Bonnie and myself and Charlie and Lauren, to convene up front here at noon for some strategy work, and then there will be lunch at 12:30.

So -- Bob, you had a --

MR. ZALES: Yeah. I just have a real short statement, Mr. Chairman. I've enjoyed everything for the past three days here, and I think that the council presentations yesterday were very good and the presentations today, and I think the one thing that we've heard everywhere we've met is that every region has its own particular needs and wants. And I think through the council part yesterday and I think at the next meeting when we hear from the other four councils, that this panel is going to see that, especially from my perspective, and I think from many others, that the councils deal best with those local needs and wants from people.

And the discussion here today from Bonnie talking about locals getting involved in research and things like this, I think that that's the perfect venue to have that done, and I would like to see this committee keep that in focus as they're dealing with coming up with the guidelines that we're mandated to

do for dealing with MPAs, that we create a broad set of guidelines that can be adapted to local areas and local regions.

Thank you.

CHAIRPERSON BROMLEY: Okay. Thank you. So the subcommittees will convene in the new location and I'd like to have the chairs and the sub-chairs of the subcommittees come here at noon. And so between now and 12:00, get your groups organized to carry on in your absence for a half an hour between 12:00 and 12:30. Lunch will be laid on out here in the entryway at half past 12:00. And we will meet back here at three o'clock for our plenary session.

So thank you all and mahalo.

(Subcommittees meet and working lunch until 3:08 p.m.)

AFTERNOON SESSION

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CHAIRPERSON BROMLEY: We have an hour and a half. We're under a very strict time constraint today because the sunset is driving everything. We have to be to the Humpback Marine Reserve by 5:30. We have to leave here at 5:00. So we don't have a lot of slack. So we're going to move right into the reports.

Group 2 -- oh, yes. Good. The yellow sheet's coming around for transport. So I had said Group 3 would go first, but they needed a bit more time, so Group 2's going to go first. So, Lelei, it's yours.

MR. PEAU: All right. Thank you, Mr. Chair. We -- Group 2 spent the last three, four hours again reviewing comments that were solicited yesterday and also filling in the gaps. We spent some time on finalizing our definitions as well as the organization. We made some changes on the category. But the -- our report this afternoon will reflect not only progress that was made but also really the spirit of collaboration among the members within our group on our effort to fulfill our mission.

You will -- I might also say that this is

still working in progress. We have made some great strides from yesterday, but we also recognize that there is -- continue to be some areas within our presentation that will require us to go back and spend a little bit more time on it.

Within our preamble, I think the outline is being circulated or has been circulated -- we tried to identify, again as a reiteration of yesterday, guiding principles that should be incorporated in every MPA or MPA process.

We thought creating an early scriptive, flexible uniform process. We have identified -- this is also true in most of the presentations we heard in the last two days -- that the four cross-cutting themes that we identify are roles and responsibilities, communication and education, stakeholder involvement, and research.

We have four categories that we have focused our efforts in the last two days. You will hear later this afternoon focus on initiation, which is a change from our outline yesterday. It was pre-assessment but, you know, again, we changed it to initiation, which is we're looking at opportunities for individuals or organizations to consider whether

an MPA is warranted for an area.

Planning as a second area, implementation, and then adaptation management.

We've divvying up our presentation in four. Dolly will give the latest update where we're at with definitions, and then John, Gil, and George will be reporting on the four areas of our outline. So, Dolly.

DR. GARZA: Thank you, Lelei. I'm trying to see if that's big enough for me to read. I'm getting old. So our subcommittee met today in the sunny room and we're not sure -- I mean, we coveted that room until we realized that you could spend a lot of time looking out and not a lot of time doing. And that may have resulted in consensus when -- because we were too busy looking. But we did duke it out and I think we did come to consensus, and this is I would like to say after numerous conversations and debates and consideration of the comments from the full committee the other day. We have come to these consensus definitions as of 9/23/04. This does not mean that they will be the final definitions. Sometimes we even put the time on them because it does change from ten minutes to ten minutes.

"Effectiveness" did not change too much from what we presented to you: "The degree to which management actions are achieving the goals and objectives of a marine protected area." We discussed it quite a bit and felt that keeping something concise was important and some of the discussion on what should be included in it we felt was actually part of the planning and process of an MPA, so we left it short.

"Stewardship" we did change. We appreciated the comments that we heard on that. We started with a simple definition. We went to a very wordy definition, and then we tried to condense it into something that was meaningful and yet not too long. It is: "A commitment by interested, affected, and effecting parties to careful, responsible, and proactive management and use of individual MPAs and the national system of MPAs to ensure the goals and objectives are being achieved for the benefit of present and future generations."

So in these changes, we were trying to recognize that it is not just the management, but it is the commitment of the community and the users to be part of this process.

Under "stakeholder," this certainly took a lot of discussion and it was a combination. We had a two-page discussion on stakeholders and this is what we have now: "Individuals, group of individuals, organizations, or political entities interested in and/or affected by the outcome of MPA decisions. Stakeholders also may be individuals, groups, or other entities that are likely to have an effect on the outcome of MPA decisions."

And so we were trying to be comprehensive of not only people that are involved in the MPA process may have direct benefit or costs through it, but through an outreach program the up-river people of Mississippi River would also be included in this definition.

The "adaptive management" also went through numerous iterations and will probably take further definition possibly for you to understand because there are different definitions of "adaptive management." There are some very specific definitions that are applicable to social science, and then there are the way we may think about adaptive management as people who have just simply looked at those two words put together for the first time.

So it is: "The cyclical process of systematically testing assumptions, generating, learning by evaluating the results of such testing, and further revising and improving management practices." And in this one here, we did cite where it came from. That was one of the suggestions. And as an aside, we often did turn to this particular document, the "How Is Your MPA Doing" and looked at other definitions when we were looking at how we were defining these words, but this one did come from the "How Is Your MPA Doing," and I'm not -- I don't think we changed that at all after all the iterations we went through.

The goal is a broad statement of what the MPA is ultimately trying to achieve. Again, this is from "How Is Your MPA Doing," trying to be concise there.

The objective: "A specific statement of what must be accomplished to attain a related goal, something that is measurable," again through the MPA.

The co-management, also "How Is Your MPA Doing." "It is a partnership in which government and stakeholders share the authority and responsibility for making decisions about management of the resource.

It can take many forms and involves a high degree of stakeholder participation."

And in looking at our reference to the "How Is Your MPA Doing," I mean, we didn't pull these together in five minutes and stamp them off. It was a substantial amount of discussion before we said, “Okay, geez, you know, the wheel that they invented before us was pretty good.”

Thank you.

MR. PEAU: John.

DR. OGDEN: Well, I want to emphasize in introducing the next four sections of this, that we tried to take George Lapointe's comment the last time we reported somewhat to heart insofar as we could in the sense that we realized that you haven't had a -- you don't have a document in front of you to follow along, so you have this sort of outline that is skeletal and so on, but we hope that between what's on the screen and what's on the outline, you can follow along with that.

We also realize that this is still a work in progress because none of us have had the opportunity to review a hard paper copy, and you know how that is, looking at things on the screen versus

hard paper copy.

So initiation. We've had some general discussions in this group about how these -- how initiation takes place but, clearly, this is a -- viewed as sort of a top-down umbrella in which local initiation and local opportunity sort of prevails and it's, I think, the appropriate combination of top-down and bottom-up in general overall concept.

Initial steps in this opportunity, which will accrue under the Executive Order, is the articulation of why an MPA is warranted for a particular area. This could address a problem, a cultural value. It could be some other kind of opportunity. And that would be one of the first things.

Identification of stakeholders is a given. We've had -- we all realize that this process is going to be bottom-up and that it's going to require and, indeed, demands the participation of local people and interests and it behooves everyone involved in this initiation process to identify the broadest range of stakeholders from the very beginning.

This initiation should involve a jurisdictional review, and I don't think I need to say

much about that. We understand the cross-cutting jurisdictions that are involved in NOAA sanctuaries and estuarian reserves and fish and wildlife reserves and so on and so on. And these -- as well as tribal and other rights -- and these must be taken into account from the very beginning.

An investigation based on past experience of some of our group. This initiation process should involve an investigation of whether an area is of cultural importance. And, as a general rule, I think it makes sense not to essentially site marine protected areas in culturally significant zones, as we've heard in various presentations here, unless we have the backing of the local community.

Is -- the initiation process involves a review, I suppose part of the jurisdictional review, but really relative to the MMA analysis of the center and so on, the whole thing that's going on with respect to the Executive Order. Is the MMA or MPA in a local system, perhaps a state system, or is it part of some national system, like a national marine sanctuary or something like that?

And that protocol is really referring to a communications protocol; that is, who do we call? And

I suppose that when we eventually get around to putting this in final form, that's going to be part of the stakeholder identification.

CHAIRPERSON BROMLEY: You have about ten minutes left, John.

DR. OGDEN: Ten minutes. Oh, I'm sorry.

CHAIRPERSON BROMLEY: Whole thing.

DR. OGDEN: Oh, okay. I'm sorry -- professor and all that.

Scoping. Four outlines under planning: scoping, contacting people, again stakeholder involvement as defined by Dolly; assessing resources, habitat characterizations, and other forms of resource assessments.

We haven't discussed this in great detail, but this we largely concede as being sort of map-based, habitat maps and things like that, assessing resources.

And identification, again, of whether or not an area's of cultural importance.

MPA goals and objectives. I think this is pretty clear from -- or pretty similar to what we discussed before. Goals should be clear and understandable. The -- obviously, you need a

relationship between individual sites and the national system -- natural heritage, cultural heritage, and sustainable production, as in the old objectives. Clear, practical, and measurable, as defined before. And, again, cultural and local sensitivities. They are the stakeholders.

Next. Work plan elements. Again, going through this process of identification, goals and objectives, building up to a work plan, establishing an outline of procedures and processes, a timeline, a budget, monitoring, assessment plan, education, communication, compliance, methods for evaluation and testing, etc. to enable adaptive management.

And then, finally, again this keeps coming up -- I see as I'm talking through this that we're going to need to snip this a little bit -- but, anyway, participation of affected -- interested, affected, and effecting parties. We keep coming back to this, hammering on this idea of the need for the broad range -- the broadest range of stakeholders to be involved in this, and that's easy to say and this set of things identifies some of the problems that we perceive in establishing that smooth transition.

And I'll move on, Mr. Chairman.

MR. PEAU: Okay. Gil will cover the implementation.

MR. RADONSKI: Okay. I'm going to read the next section and, again, to reiterate, it's a work in progress. Please look at this as we are trying to capture the range of issues under these various topics. Some of it will sound redundant because we do have the cross-cutting themes.

So under the miscellaneous parts of implementation, we were interested in establishing sustainable, long-term financing plans to ensure that we can meet the objectives and strive for implementation of the MPA.

Implementation of specific MPAs might be under a variety of legal structures, and John mentioned that earlier, that we would identify those various legal structures.

Managers should consider co-management with community, tribal, state. This is sharing the responsibility.

And coordinated management. We will define this later, but we see it -- co-management and coordinated management -- as not the same.

Four, the process must be clear, have open

communication, and be accountable. And we need to incorporate social science and local and traditional knowledge into management from the very beginning.

In the compliance part of implementation, again, we're trying to capture a range of ideas and we solicit your input later on.

One, encourage compliance through clearly demonstrating the value of MPAs to affected parties.

Provide local education on MPA rules and benefits.

Recognize and foster conservation ethics and practices.

Consistent enforcement of minor offenses. Currently, the tendency is to enforce only big violations.

Assure compliance goals and tools are appropriate for the MPA's objectives.

Identify and implement appropriate incentive programs for compliance.

Design the MPA system to encourage compliance, minimizing costs of enforcement and enhancing effectiveness. You can see some of these themes keep running through the system. This includes not only questions of siting and boundaries in

relation to law enforcement, but also effective participation in stakeholders, especially those to whom the rules directly apply: fishermen, divers, boaters, etc.

Recognize and foster a stewardship culture where it exists and fostering it where it is weak or doesn't exist.

Have people participate, recognize, and accept responsibilities to be a good steward. This is what we're trying to foster: personal involvement.

And the last item is enforcement at the beginning and enforce small violations. And, as you can see, this is a work in progress and that's a little bit redundant with an earlier part, but I need to save some time for Bob to do his part.

MR. MORAN: And I'll read through it like the FedEx man.

One thing you will know on your outline, it's listed here "evaluation and adaptation," and this outline was printed at one o'clock and, since then, it's changed to "adaptive management." And as I go through this, being one of the only non-scientists on the committee, I'm sure the scientists will weigh in and tell me where I'm drifting off. And that, plus I

also had the seat where I had the good view in that room, but let's start.

Adaptive management. You've heard the definition from Dolly. It's a cyclical process and that's kind of what was happening here during our discussions. But it's a critical element of how we're going to manage and evaluate and improve our efforts dealing with MPAs.

It's a scheduled and planning process based on inputs of science, management, and public participation. Again, you can see the cross-cutting issues coming into play there.

We are -- there's considerable discussion on number three. It's ensuring that adaptive management does not employ experiments with negative impacts on the livelihood of other interests purely for the sake of doing experiments. And there may be further discussion on that, but I wanted to bring it to your attention.

Where are my glasses? Adaptive management should address real and emerging threats or opportunities -- always looking for the opportunity to improve our understanding.

And we also believe that in the context of

MPAs, sites can be chosen and monitored in ways that maximize the gathering information that can be used to improve management. And, again, going back to the definition, this is continuous and systematic as well.

And the goals of adaptive management should be developed in collaboration and made clear with those as we're beginning the process of management and adaptive management.

The key element of this is information and, again, this goes back to what Gil and John recognized -- is the cross-cutting communications and educations of viable -- needs to be viable, needs to be improved, needs to be significant in our activities.

And, again, the frequent and regular basis of communication with stakeholders, the broad range of stakeholders that we had described.

And this is where my science is going to fault me, but we did have a discussion regarding raw data and information about the methods and associated metadata should be accessible to everyone; that is, the data and the information about that should be, as it says, available to everyone.

The final point -- and we went back and

forth around assessment or evaluation, but we decided on evaluation. Critical element of adaptive management. It will be used, but basically evaluation of effectiveness will be done on a planned schedule. It should be participatory. There should be continued assessment of the design. It should be transparent, clear, and well-understood among all stakeholders. The evaluation should monitor and measure progress toward objectives using performance indicators.

It also should be fed back into the adaptive management cyclical process. And, again, getting back to some of the questions we need to ask when we're undergoing periodic review of the goals and objectives: are they appropriate, are the performance indicators appropriate? And, again, putting that back with all the available information and data and continuing a reassessment.

Another critical element within this is research and, again, we have recognized participatory research and outreach among tribal, experience-based, and traditional knowledge, as well as the existing natural and social science resource bases.

Funding, which has been mentioned here several times, is a critical element toward the

research and should be a high priority for MPAs.

Again, the element of collaborative and participatory research involving scientists, non-scientists, local experts, and the wealth of information they can bring to support MPA stewardship is critical.

We also need to ensure in the cultural aspect to incorporate local knowledge and provide encouragement and provide opportunities for that input into the research programs.

Also, make sure that the research programs include both social science and biological science projects and they are tied directly to the goals, objectives, and monitoring of both applied research and in basic research as well.

And coordination of the research and monitoring should be linked and coordinated.

And, again, a critical element for some in our committee is this research should be sensitive to those -- to conflicts with other users in and around the MPA.

And I -- and, again, the cross-cutting themes. I will make one footnote here. I want to give due regards and due credit to Heidi, who did a

wonderful job of putting this all together in a short amount of time.

And I also want to use something I learned earlier today in cultural tools, and that is I found out that certain of the NOAA staff had to reach into their own pockets to make copies of materials for the benefit of all of us. And I think the tool of shame should be used here and make sure that Heidi and others get reimbursed.

(Applause.)

CHAIRPERSON BROMLEY: This shall not stand. Yes. It will be rectified one way or the other. Okay. Lelei, is that it?

MR. PEAU: That's it.

CHAIRPERSON BROMLEY: Okay. Afraid we don't have much time, any time really, for comment. I'm sorry but there we are.

So now the responsibility is on individuals to communicate with Lelei or others. You'll have another crack at this, as we will explain later. But we have to move on.

Now -- yes, George.

MR. LAPOINTE: I'd love to communicate. Are we going to get an e-mail copy of that?

MR. MORAN: Yes.

MR. LAPOINTE: Because I don't want Heidi to make any more copies.

CHAIRPERSON BROMLEY: You will get it.

MR. LAPOINTE: Thank you.

CHAIRPERSON BROMLEY: Mel, do you want to go second now?

MR. MOON: Sure.

CHAIRPERSON BROMLEY: Okay.

MR. MOON: Our committee met and we had a discussion that started out with a presentation by Jeff Pearson, Lieutenant Jeff Pearson, about enforcement, and so we were encouraged to address some of those issues within some of our deliberations and discussions, and it was a very good talk.

We talked also about the panel, the tribal panel, and the paper development and the information that is going to be forwarded to the website. We reviewed some of the information that is going to be forwarded to Lauren to put on the website.

So in the interest of time, our group, on our paper, the process to maximize intergovernmental coordination while expanding a national system of marine protected areas, we had a very good session and

exchange.

I'd like to extend my appreciation to Bob Bendick of our group, who's been described in sort of the coordinator of all our ideas and thoughts and go ahead and turn it over to Bob to explain what we've got so far.

MR. BENDICK: Thanks, Mel. And I'd like to thank the members of the Committee for really a hardworking session and Kate for putting this all together. It would not have been possible without her, and particularly Mary Glackin and Jackie Schafer and Jeff Pearson, who really contributed to what hopefully is something useful.

We sort of buzzed through a PowerPoint of this yesterday. A lot of questions were raised. I think we conveyed a good deal of misunderstanding in that short period, so hopefully we'll try to correct a little bit of that.

The objective of the subcommittee is to try to figure out ways to bring the different levels of government together to accomplish and bring forward what Subcommittees 1 and 2 have suggested and to accomplish that in a way that maximizes coordination, planning of such a system.

The context of this is really your recommendations, and I'm not going to spend time sort of recapping those, as well as some of the research done by Subcommittee 3. So getting into this proposal of integrating this stuff in a way that creates a workable system, we set forward some guiding principles that it should rely on existing authorities -- this is one of the misimpressions I think we conveyed yesterday -- is creating all sorts of new institutions and authorities, which was not the case.

That it employs a regional approach to engage citizens and agencies in developing a comprehensive national system.

That this is sort of a format or a process designed to promote and engage and encourage action. That that should be a transparent process, that it should provide incentives for participation, and that it respects the sovereignty of states and tribes.

So here again is the proposal, a process for establishing a new national system. First, at the national level, using the vision and goals set out by Subcommittee 1 that the Secretaries of the Departments of Commerce and Interior, in consultation with other federal agencies, a kind of core group, would

establish guidelines, objectives, and policies for the national system.

Create a new or utilize existing regional entities to assist in implementation of these guidelines and, again, we're not talking about a new bureaucracy but drawing together state, tribal, and agency representatives on a regional level.

To work with Congress to provide funding, something you've all mentioned.

And to conduct a periodic review that is this national group -- periodic review and evaluation of the national system and how it's developing and develop national priorities to be considered by regional entities, a sort of filling-the-gap process.

So that's at the national level.

At the regional level, to bring together these regional entities composed of federal agencies, states, and tribes who would, in conformance with the national guidelines, utilize existing authorities and implement a process to identify and nominate sites within regions to the national system.

So they would set the framework and the process for a process of nominating sites to the national system.

They would establish regional goals and priorities, planning and technical support for this process.

Facilitate coordination after things entered the system among MPAs and across international boundaries. We certainly saw a lot of the need for that in the Pacific today.

To coordinate research and monitoring.

Provide a mechanism for enforcement coordination, something that Jeff emphasized to us was very much in need.

So with that sort of national and regional level structure, you might call it, again not something entirely new but made up, stitched together of existing structures, the process of taking sites -- and we had a lot of discussion about MMAs and labels, so we just called them sites -- the process of taking sites and moving them into a national network of sites, a national system of sites, might go something like this.

That states and federal agencies, tribes, groups of agencies, or even citizens would nominate to the regional entity existing or new sites for inclusion in the national system.

Now, we had a long discussion about what would be the process for sites that already have some sort of status versus sites that are entirely new. And we have some thoughts about that but we don't -- there's not really time to get into it today.

Nominations will require -- that is, if an agency or a citizen group or a tribe wanted to move a nomination forward to become part of the national system, there would be certain requirements, and this would be true for an existing site or for something entirely new:

Description of the current levels and sources of protection and needed changes to meet national system standards.

Identification of resources to be protected and managed in conformance with the purposes set out.

Identification of threats, goals, and strategies to address threats.

Plan of action to achieve the goals.

A description of contributions to achieving regional and national system goals.

A description of links to other MPAs.

And a monitoring and adaptive management

plan.

So the guts of this would, I think, pretty much all be drawn from the work of Subcommittee 2 on defining what really works in these regards.

Based on criteria set out for the system as a whole, the regional entity would make a recommendation for acceptance or non-acceptance of the candidate site to the national entity. Now, just to be clear, this doesn't mean that if a site -- if people get together and have a good idea for a protected area of some sort and was turned down as part of the national system, that it would go away. No. It would not go away. It would continue to do what we're doing, but we're talking about a national network of sites that accomplishes national goals when taken altogether, one built from the bottom up.

Implementation would be that if something were accepted into the national system, a memorandum of agreement or some sort would be signed among all the involved parties setting out their roles and responsibilities. Again, how that were structured is tied very closely to what Subcommittee 2 -- the work that Subcommittee 2 has been doing.

It would commit to -- that group of

organizations putting this forward would commit to internal and external monitoring of performance, and they would receive support to achieve the goals of the national system.

Now, the belief is that for it to be worth people's while to, you might say elevate or nominate things as part of a national system, there needs to be some incentives. So I think people got the impression yesterday we were talking sort of a free ride funding for anybody who made the grade. That is not the case, although some would like it to be the case. But we are talking about some level of financial support, matching funds or special allocations, funds to support intergovernmental coordination, as an incentive for moving things into a national system.

In order to make that possible, there needs to be a sustainable source of funding to do a bunch of things, and they're listed here.

Other incentives could be additional protection from harm by off-site factors, that if something was elevated to the national system, some upstream use or upcurrent use that could harm that site might get some additional attention and protection from people outside, agencies outside the

boundaries.

Some enhanced intergovernmental coordination; that is, marshaling the forces of various agencies, to assist in the protection of that site. And then national recognition, as we heard before, designation may attract tourists or economic development or other attention.

And, finally, the benefits of this approach, we'd suggest, creates a system of MPAs that meets the national and regional goals. For new MPAs, operates from the bottom up in an orderly way, moves various kinds of existing MPAs -- and these labels are not quite right in this context -- but moves various kinds of existing MPAs into a coherent national system, uses financial incentives to get people to work together, sets out a sort of standardized planning process that's a ticket for entry so that people are operating in some parallel fashion and you have the national system based on looking at threats, whether it's to cultural or fisheries resources, in some similar way. Can work with or without the organizational changes proposed by the Oceans Commission.

We -- there is a provision that we talked

about yesterday, the hold existing things harmless. So in this whole process, some things -- some protection that's already afforded would not go away. And it could be done a bit at a time. It doesn't have to be borne whole.

So that's the summary, Mr. Chairman, of our thinking, certainly very rough still, but we hope reflective not only of the thoughts of Committee 3 but the thoughts and intentions of Committee 1 and 2.

CHAIRPERSON BROMLEY: Wonderful. Thank you so much.

Okay. We have 15 minutes for comments, reaction.

MR. BENDICK: And let me -- I see questions. Let me suggest that I'm not gonna be -- it would not be appropriate and I'm not gonna be the only one to answer the questions, so I -- the members of the committee -- now that I've said my piece, I have to get some water -- members of the committee should feel free to chime in on the answers.

CHAIRPERSON BROMLEY: Okay. John.

DR. OGDEN: Thank you, Mr. Chairman. Thank you to Group 3. I think we can all be really encouraged at the extraordinary degree of congruence

in certain sections of the work of both Subcommittee 2 and Subcommittee 3 and it brings up a point that was made earlier by someone else that before too long, we should try to get the combined printed documents in front of us and we may have some gap-filling to do in tuning these two presentations. But that was an excellent presentation. Thank you.

CHAIRPERSON BROMLEY: Rod.

DR. FUJITA: Thanks, Mr. Chairman. I also am very impressed with the progress that the group has made and this is really looking good.

I may have missed it this time, but I think the last time you presented this, you had this really excellent recommendation in there about preventing the erosion of existing protections. I know you said something about holding the existing marine sanctuaries harmless under the benefits, but did you retain that language that you had in the previous version?

MR. BENDICK: Yeah. That's the intent of it. We got a little -- ran a little short at the end, so it's the old language -- some other language is in here, but that is the intent of this, not to erode existing protections.

DR. FUJITA: I just wanted to make sure it didn't only apply to marine sanctuaries but --

MR. BENDICK: Right.

DR. FUJITA: Okay.

MR. BENDICK: Yeah.

CHAIRPERSON BROMLEY: George Lapointe and then David.

MR. LAPOINTE: I kind of liked the preventing of the erosion of existing protection more than holding them harmless. I mean, it sounds like if there was something they should do, they wouldn't have to do it with that statement. So --

MS. SCHAFER: Had we had a little more time, we would have taken some of the boards that we chose for the slides yesterday and put it into this text, and we just ran out of time. But that --

MR. LAPOINTE: Fair enough.

MS. SCHAFER: -- that's the same concept that Rod has proposed.

CHAIRPERSON BROMLEY: Okay. Wally.

DR. PEREYRA: Yeah. A short comment in response to Rod's comment. I think that if we were to put in some sort of a hold harmless statement or something, I think that sort of is counterintuitive in

regards to adaptive management. Because the way I would consider adaptive management is that you'd be reassessing continually and making alterations and so forth as you went. So I think there's -- we need to think that through maybe a little bit before -- the marine sanctuaries may be something a little different; I'm not sure.

But the question I had involved -- and I don't know -- Bob, I guess maybe I should forward it your way -- under NEPA, any federal action requires that you look at the range of alternatives that might be germane to addressing a particular problem that you're trying to address. And in this particular case, how would the process proceed in terms of looking at alternatives -- the analysis that would have to be done associated with that and so forth through this process that you've laid out here?

MR. BENTON: Maybe I'll field that. Thank you, Mr. Chairman.

There's a couple of points I think to factor in to responding to your question, Wally. The first is that in our discussions, what we tried to do was in a sort of orderly manner set out a process that would provide some over-arching guidance from the

national system but be very oriented around a regional approach. And in those discussions, we tried not to be too prescriptive in how the regional approach would do its business.

So, for example, you look up there and you'll say -- you'll see that we didn't say exactly who the regional entity might be. It could -- and this is a discussion the larger group might need to have -- but it could utilize either existing regional entities or maybe there would be some other regional entity that would be in place to do the task you're talking about.

The other key piece is that we tried to emphasize in here utilizing existing authorities because there's no new authorities created under the Executive Order and, absent Congressional action, there are no new authorities. So you have to use existing authorities.

And part of that would include, if it's a federal kind of action, would include appropriate NEPA analyses, it would build off the kinds of things that came out of your committee about looking at -- although I know the term "costs and benefits" was changed, I still fall back on my retrograde jargon --

but cost and benefit analyses and those kinds of evaluations that come out of Subcommittee 1.

And I think that the major thing that goes on here that I hope is clear is that these designations and movement of an existing site into the national system only occurs once the regional organization gives it a stamp of approval, whatever that regional organization is. And then -- so that process has to occur at the regional level.

And we tried to emphasize that at least all the managers would have to sit around the table to -- in some fashion -- to make a decision about that question, whether it should be promoted to the national system or not.

We didn't get into, for example, the question of whether or not there should be other non-governmental folk sitting around that very same table at the same time and be part of that decision. We recognize that the states, the federal agencies, and the appropriate tribal entities that have management authorities, given their status, would. We didn't get to that other question.

That's sort of a roundabout way of trying to answer your question. I can't say it's going to

directly, yes, NEPA will absolutely apply and there will be a problem statement with all the alternatives, elements and options, and it will be an EA or not an EA because it really depends on how the particular circumstance unfolds.

And we're trying to make sure that the system, if this group bought into it, was a system that was based on a regional approach, that it included the folks in that region in making the decision, and that you couldn't -- you had to go through that regional approach to get on the national system, that it wouldn't be something dictated out of, you know, an office in Washington, D.C.

Does that help answer that question?

DR. PEREYRA: Apologize, Mr. Chairman. I should have known I should never ask David a question. I've had many years experience --

CHAIRPERSON BROMLEY: That's amazing, Wally. I was having --

DR. PEREYRA: -- with him and he's just true to form. He's terrific.

CHAIRPERSON BROMLEY: I was having some of the same thoughts.

DR. PEREYRA: We'll have a glass of wine

over this, David.

CHAIRPERSON BROMLEY: Duke it out later. Jim Ray.

DR. RAY: Wally asked the question I had. I'll withdraw my request.

CHAIRPERSON BROMLEY: Other comments, reactions? I'd ask if you want to try again, Wally, but I'm afraid of the implication.

DR. PEREYRA: You really don't want to do that.

CHAIRPERSON BROMLEY: No, I don't think so.

DR. PEREYRA: You've had that experience -- 20 years.

CHAIRPERSON BROMLEY: Okay.

MR. BENDICK: If I could just add that we will have some written text of this refined in ten days or so and then distributed. We'll put it on the website for everybody to provide sort of written redline comments and questions back to the Committee.

CHAIRPERSON BROMLEY: Yeah. And when we finish, we will talk about the protocols for that follow-up process. It will be standardized across all the groups. That's wonderful.

DR. PEREYRA: We'll probably have another conference meeting -- conference call in about three weeks is what we're planning.

CHAIRPERSON BROMLEY: Okay. Nice. Okay. Group 1, are you still with us?

DR. HIXON: Thank you, Mr. Chairman. Committee -- Subcommittee 1 worked right up to the bell, so, unfortunately --

CHAIRPERSON BROMLEY: Beyond the bell, if I may say.

DR. HIXON: Beyond the bell, yes. Thank you. So we don't have a group presentation, which is what I would have much preferred, and we're still not quite done with our document.

Our intent has been and continues to be to address the comments that have been made and incorporate those so that this document becomes truly a communal document by the whole Advisory Committee.

We will finish our document soon and, again, have it posted on the web, at which time we will be requesting written comments.

What we have found is that the comments that not only identify a problem but also offer a suggested solution have been the most useful to us.

So we would invite specific suggestions for wording and things of that sort.

So what I'm going to do is take this piece of paper off and basically just read the document as it now stands without comment.

Now, what you see in red are the changes that have been made since we've arrived in Maui. We're starting with -- the least polished is the very first paragraph, which is sort of trying to be an opening paragraph. If you don't like the wording, then you agree with everyone on the subcommittee.

Okay. Retaining goals of a national system of marine protected areas. Important: Underlined terms and concepts are defined in the glossary. Footnotes: Everything that's in red is already underlined, so you're going to miss a lot of the underlines.

Recent reports, including the report by the U.S. Commission on Ocean Policy, document problems with some marine ecosystems of the United States and a need for prompt action and improved cooperation among federal, state, territorial, tribal, and local entities to enhance and protect the marine environment for present and future generations.

A national system of marine protected areas is one important approach for conserving the nation's marine environment.

Executive Order 13158 of 26 May 2000 defines a marine protected areas as "any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for all or part of the natural and cultural resources therein." This document proposes foundational principles and concepts for establishing a national system of MPAs and includes definitions of essential key words.

The vision is an effective and comprehensive national system of marine protected areas that first meets multiple conservation and management objectives for marine resources by implementing three broad categories of MPA: natural heritage MPAs, cultural heritage MPAs, and sustainable production MPAs.

Second, it's based on input from the public, including stakeholders, and use of the best available information from natural science, social science, and customary knowledge.

Third, recognizes both on-site and off-

site influences; i.e., freshwater, terrestrial, and atmospheric.

Next, recognizes opportunities for regional and international cooperation that are compatible with international values and consistent with the international commitments of the United States or compatible with international commitments of the United States. We're working on that one still.

And, finally, is integrated within and as part of the existing ocean management framework of the United States; i.e., federal, state, territorial, tribal, or local laws and regulations.

Goals of the national MPA system will include, but may not be limited to: first, conserving and/or restoring marine biodiversity and representative examples of the nation's major marine ecosystems and habitats; second, promoting ecologically and economically sustainable use of marine resources; next, enhancing the conservation, use, and enjoyment of the nation's natural and cultural marine heritage; and, finally, raising awareness and knowledge of marine and coastal regions.

Components of the national system may include, but not be limited to: MPAs first

representing different marine ecosystems and habitat types; second, manage to conserve biodiversity in general, as well as particular species, such as species at risk, threatened or endangered in their critical habitats, species for which concern exists about their status but for which there are insufficient data regarding their populations and habitats, ecologically significant species and processes, species taken incidentally by commercial and/or recreational fisheries, and commercially and/or recreationally important species.

Next, protecting areas vital to the conservation of particular species, such as spawning and nursery grounds or unique habitats.

Next, manage to protect unique biophysical and geological features.

Next, manage to protect cultural resources and provide appropriate access and sustainable use.

Next, manage to provide opportunities for scientific research or education.

Or, finally, forming networks designed to enhance the conservation of species whose local populations are linked by dispersal or other movement.

MPAs may qualify as part of the national

system on the basis of adequate information regarding need, design, and implementation, including consideration of the following factors, where relevant:

First, rigorous assessment of the need for and benefits of an MPA based on natural science, social science, and/or customary knowledge.

Second, broad and representative stakeholder input.

Third, social and cultural values and consequences.

Fourth, ecological and biological values and consequences.

Fifth, economic gains and losses, including both monetary and non-monetary implications.

Next, estimated costs of effective implementation, monitoring, and enforcement.

National interest, including national security issues.

Alternative means of achieving MPA goals.

Clearly articulated goals and measurable objectives to address identified needs.

And a specific plan for monitoring and evaluation, including natural science, social science,

and customary knowledge to allow subsequent adjustment of MPAs and MPA networks in an adaptive management framework.

MPAs designed principally to conserve living marine resources will be designed to consider, one, processes important to ecosystem structure and functioning and, second, ecological linkages between MPAs and the broader environment.

Glossary. This glossary is an integral part of this document -- as an integral part of this document is included to clarify the intended meanings of key words and concepts using, as available, legally or broadly accepted definitions.

We'll plug in "adaptive management" when we get the final from Subcommittee 2.

"Area: Marine site or region that has legally defined geographic boundaries. The site or region shall not include the entire U.S. EEZ or an entire state's waters."

"Biodiversity" is: "The variety of living organisms in all their forms. Technically, biodiversity includes variation at three levels of biological organization, from genes within species to species themselves to ecological communities of

species."

"Categories of MPA." There are three general categories. This is taken directly from the MPA Center publication which we've all seen numerous times before, so I won't read again. It defines "natural heritage MPAs," "cultural heritage MPAs," and "sustainable production MPAs."

"Cultural resource," this being from the Ad Hoc Subcommittee on Cultural Resources: "Any ethnographic resource or submerged historical or submerged cultural feature, including archaeological sites, historic structures, shipwrecks, and artifacts in the marine environment. Ethnographic resources include natural resources and sites with tribal or traditional cultural meaning, value, and use."

"Customary knowledge" is: "Tribal, traditional, and local ways of knowing, including traditional ecological knowledge." This is actually based on some members of the Cultural Subcommittee I spoke with.

"Ecological linkages" are: "Connections between marine systems manifested by swimming, in the case of fish or other nekton, or by horizontal and vertical drift or diffusion, in the case of nutrients,

pollutants, and larvae and other plankton, or among terrestrial, freshwater, atmospheric, and marine systems."

An "ecologically significant process" -- processes include interactions among species, such as predation, competition, mutualism, and habitat formation within species, such as communication, mating, and schooling, and between species in the physical environment that play important roles in the structure and function of an ecosystem and its component communities.

Ecologically significant species have substantial roles and impacts on their ecological communities.

The structure and functioning of an ecosystem is its biotic and abiotic organization and associated processes, including interactions among the constituent species, interactions being predation, competition, mutualism, etc., as well as the cycling of matter and the flow of energy.

"Lasting: Enduring long enough to enhance the conservation, protection, or sustainability of natural or cultural marine resources. As detailed in Table 1, the minimum duration of 'lasting' protection

ranges from ten years to indefinite, depending upon the type and purpose of MPA. An indefinite duration of protection means that the intent at the time of designation is permanent protection. The distinction between 'indefinite' and 'permanent' acknowledges that MPA designation and level of protection may change for various reasons, including natural disasters that may destroy or alter resources or changes in societal values."

"Marine: Open waters and sea floors, including intertidal areas to extreme high tide level and estuaries extending upstream to .5 parts per thousand salinity and the Great Lakes."

"Marine resource," in general, is: "Any living or non-living entity in the marine realm that contributes to ecosystem processes or services and/or is used or otherwise valued by humans."

"Monitoring and evaluation is the scientific process, based on independently reviewed natural and social science, of determining whether and to what extent an MPA has met or is on course to meet its specified goals and objectives and whether modifications are warranted."

A "network" is: "A set of discreet MPAs

within a region that are connected ecologically through dispersal of reproductive stages (eggs, larvae, spores, etc.) or movement of juveniles and adults. The management of certain marine species may require networks of discreet MPAs encompassing regional collections of local populations linked by dispersal and movement, which may be essential for some local populations to persist. The creation of MPA networks must take into consideration other non-MPA areas that provide similar linkages and does not necessarily imply additional management measures outside MPAs nor the creation of a super-MPA."

"Protection: Specifically established with the goal of providing an enhanced level of conservation for all or part of the natural and cultural resources therein. Restrictions may range from managed use to no access."

"Representative examples of ecosystem and habitats" are: "Areas that are characteristic of recognized major categories of ecosystems and habitats. An ecosystem comprises all the species that occupy a habitat, the non-living environment included within, and all biotic and abiotic interactions and processes included therein."

A "habitat" is: "A place where species normally live, typically characterized by dominant physical features and/or structurally dominant organisms."

"Reserved: Legally established by federal, state, territorial, tribal, or local governmental authority."

"Species at risk: Threatened or endangered." I'm not going to read this for the sake of time. This is extracted directly from the Endangered Species Act. We simply used their language since it's the precedent.

"Stakeholders," we're using Committee 2's definition, which has already been read.

"Sustainable use" is: "The extraction and/or utilization of a living or non-living resource in a way that enhances social and economic benefits from that resource with the goal of conserving the long-term viability of that resource with acceptable environmental impacts. In short, the goals of sustainable use include ecological, social, and economic viability."

Two more. "System: The envisioned national MPA system consists of MPAs of all types,

purposes, and jurisdictions in the state and territorial marine waters in exclusive economic zone of the United States that collectively enhance the conservation of natural and cultural marine resources."

And, finally, "Unique biophysical and geological features" are: "Natural structures on the sea floor, such as submarine canyons, hydrothermal vents, volcanoes, pinnacles, and unusual oceanographic features such as locally prominent upwelling areas and oceanic fronts that are rare or uncommon, including associated biological assemblages."

References -- how's the time coming?

CHAIRPERSON BROMLEY: You have 20 minutes.

DR. HIXON: Oh, I've got lots of time.

CHAIRPERSON BROMLEY: I hate to tell you that. I contemplated lying, but it doesn't come naturally, so I didn't have time to muster up the nerve to lie to you.

DR. HIXON: I hope nobody's expecting me to engage in conversation tonight.

Table 1: Definitions of lasting protection for marine protected areas. The Executive Order defines a marine protected area as involving lasting

protection. This table provides minimum durations defining "lasting protection" for all three categories of MPA, including relevant subcategories.

Note that all MPAs have a maximum possible duration that is indefinite. This table addresses only the issue of the duration of protection and does not address the issue of level or type, which will vary according to specific MPAs. Notice I have this thing memorized by this time.

Okay. Basically, what this table does is categorize the different types of MPA, list the minimum duration of protection that an entity must exist or be designated to exist before it would qualify to potentially become an MPA and then our rationale for these durations. The rationales are probably the most important parts.

So the three general MPA categories we've already seen. Under natural heritage MPAs, we have two subcategories, one being living -- no, three subcategories -- one being living natural resources, the other being large-scale non-living natural resources, and then small-scale non-living natural resources.

So with living natural resources, we're

suggesting a minimum duration of protection of ten years before that site would qualify as potentially becoming an MPA. The rationale for these minimum durations are twofold. First, procedurally, there's time required for public and stakeholder involvement, regulatory processes, and at least five years of scientific and other monitoring and analysis, including independent review in an adaptive management framework.

Scientifically, the response rate of species, populations, ecological communities, and/or ecosystems and their associated features are determined by the generation time of focal or indexed species that are being monitored.

Large-scale non-living natural resources: again, these are things like submarine canyons, volcanic features, seamounts, etc. We're suggesting indefinite protection, with the rationale being that representative unique rare or uncommon sea floor features are irreplaceable and sufficiently valued to be preserved for present and future generations.

Small-scale non-living natural resources are small geophysical features that may be poorly documented or ephemeral from a human perspective,

whereas the large-scale ones are clearly permanent from our perspective. Some examples being hydrothermal vents, methane seats, freshwater springs, submarine freshwater springs, and sand waterfalls. We're suggesting ten years as a minimum. Procedurally, it's very similar. It's the time required for public and stakeholder involvement, regulatory processes, and scientific monitoring of the persistence of the geophysical feature in an adaptive management periodic review.

Scientifically, poorly documented features may be more common than previously assumed and/or those features may be ephemeral, both cases justifying occasional adaptive management review.

Those are natural heritage MPAs.

Cultural heritage MPAs, we've now gotten input from the Ad Hoc Subcommittee on Cultural Resources, and we've modified the table thusly. We've still decided to separate archaeological resources from tribal and indigenous cultural resources because we see the rationales as being different. However, for both types of cultural heritage MPAs, the minimum duration of protection is proposed to be indefinite.

For archaeological resources, the minimum

duration of protection is justified as follows: Some archaeological features may degrade over time, requiring periodic survey and assessment, followed by adaptive management, yet the intent is that these features are irreplaceable and sufficiently valued to be preserved for present and future generations.

For tribal and indigenous cultural resource cultural heritage MPAs, the rationale is that continued access to and sustainable use of resources in an area may be paramount to a culture's identity and/or survival.

Finally, sustainable production MPAs, essentially fisheries MPAs, there are multiple possible subcategories, all of which are designed to protect focal or target species and may protect supporting ecological communities and ecosystems, including habitats and ecological processes.

Again, the minimum duration proposed is ten years. Procedurally, one must consider the time required for public and stakeholder involvement, regulatory processes, and at least five years of scientific and other monitoring and analysis, including independent scientific review in an adaptive management framework.

Scientifically, the response rate of species, populations, ecological communities, and/or ecosystems and their associated features are determined by the generation time of focal or indexed species. Also, large-scale oceanographic cycles, such as El Niño, southern oscillation, and Pacific decadal oscillations occur in multi-year time scales.

You think you're done? You're not.

There are footnotes associated with this table that are actually very important to this table. The first one just refers to the MPA Center publication and the categories of MPA. Second footnote talks about duration. The duration of protection is defined as a time period in MPA or candidate site has been designated to exist, regardless of how long that MPA or candidate site has actually existed.

For example, a three-year-old MPA designed to exist for 25 years is considered to have a duration of 25 years.

As specified, minimum durations of protection are also based on the following general considerations:

(A) Any MPA may have an indefinite

duration if specified by legal authority.

(B) MPAs with only seasonal protection must provide that protection at a fixed and regular period each year that corresponds to the timing of a predictable ecological process or anthropogenic threat. Otherwise, the absence or removal of such explicit periodic protections means the site is no longer an MPA but an MMA.

(C) Management of all MPAs must include the plan's capacity and resources to conduct regular and meaningful monitoring and analysis to assess and evaluate performance, and,

(D) The specified minimum durations of protection incorporate the times estimated to be required for: one, the MPA to become fully functional after establishment; two, some effect of the protection to occur, especially in the case of MPAs that protect living resources; three, a statistically valid trend in performance to be monitored and assessed; and, four, the appropriate adaptive management response to be taken based on the results of monitoring and analysis, which may include alterations or de-designation of the MPA.

CHAIRPERSON BROMLEY: Mark, this is hard

for people to follow jumping back and forth.

DR. HIXON: No kidding.

CHAIRPERSON BROMLEY: Is there a way you can --

DR. HIXON: Right now --

CHAIRPERSON BROMLEY: -- focus on the changes or something?

DR. HIXON: I've got four more lines and then I'll be open to any suggestions you have.

This is basically just more definitions. I've already defined "indefinite" elsewhere, "stakeholders" elsewhere, the idea of generation time. At least one full generation at a minimum is necessary to determine the trajectory of protected biological populations ecologically linked to an MPA.

And, finally, non-living natural resources that are protected principally to conserve their associated marine life are, by definition, subsumed within the category of living natural resources as habitat for those resources.

Thank you for your patience. I'm finished.

CHAIRPERSON BROMLEY: Okay. Thank you. Okay. We have comments, questions. You may notice I

gave this group some of the time that Group 3 didn't use, so that's why it did seem like they got more than a half an hour, but it's important.

So -- I have Rod, I have Tony, I have Bonnie, and I have Dan Suman. Please.

DR. FUJITA: Thanks, Mark. I just wanted to know whether I missed this or whether the subcommittee rejected two suggestions that came from the full committee.

One was that you consider a caveat, clarifying statement in the first section that lays out the goals of the national system and the individual components that says something like -- that all MPAs don't have to have multiple goals or objectives since -- especially since I guess kind of interpret it that way. I just want to make sure that that was really clear, that there can be single-purpose MPAs. They don't necessarily have to be multi-use.

The other suggestion that was made was that you include a bullet about all the other species, you know, the unassessed ones, the ones that are not commercially important, the ones that are not recreationally important. I may have missed it, but I

didn't see it in that list.

Thanks.

DR. HIXON: Sure. Just to quickly answer your questions, Rod, we did consider both of those very carefully.

First, with the concern about all MPAs don't have to have multiple goals, in those particular parts of the document, we're talking about the entire national system, not specific MPAs. So we can certainly work in making that more explicit.

Secondly, we addressed the idea of all other species by explicitly stating some MPAs may protect biodiversity in general.

DR. FUJITA: Thank you.

CHAIRPERSON BROMLEY: Good. Okay. Tony.

DR. CHATWIN: Thank you, Mark. My question is along the same line in terms of a comment that I made earlier, and I don't know if it was the format of it that might not have been useful so you were waiting for a more useful format. But it related to the part of the document -- I think it's the third -- it used to start new MPAs. Now I think it's just MPAs. And it lists a number -- MPAs to be considered for inclusion.

DR. HIXON: Yes.

DR. CHATWIN: And the comment I had made is that I suggested that there be a bullet saying that they would be assessed -- that they should contribute towards the goals of the system and that -- so in considering whether or not to include them to the system, you would consider the overall goals of the system and see whether they made a contribution or not.

DR. HIXON: Tony, I do recall that and it slipped by us.

DR. CHATWIN: Okay.

DR. HIXON: I'll ensure that it gets in. Thank you.

DR. CHATWIN: Thank you.

CHAIRPERSON BROMLEY: Good. Okay. Bonnie.

VICE CHAIRPERSON McCAY: On that same screen, first of all, the -- I don't see the relevance of "where relevant." It's -- and -- because you've just got "consideration of the following factors." And looking at them, I can't imagine any one of them not bearing in to some degree. So that just seems like an unnecessary phrase. That was my first

comment.

The second one has to do with the knowledge thing again, and we -- you know, I'll talk with others and maybe we'll read this and that because "customary" is great but it doesn't capture the importance of non-customary local experience-based knowledge which, as some of you know, is anecdotal information.

So if we can come up with "customary" including that -- your definition seems to include it, but I'm just a little uneasy with that.

DR. HIXON: That's great. And what we would love to have is just some term in there with an adequate definition and would love to hear from you. Thank you.

CHAIRPERSON BROMLEY: Good. Thank you. Dan Suman.

DR. SUMAN: I had never heard of the term "extreme high tides" before. I'm still wondering what that means. Could it mean storm surges? You just mean high tide?

DR. HIXON: We actually lifted that from a federal document. Let me see what I've got here. Yeah. We're basically talking probably -- "to extreme

high tide level." I believe there's a definition -- Steve, would you address that, please?

DR. MURRAY: Yeah. Just quickly, "extreme high water spring tide" is typically listed as the upper boundary, the highest high tide of the year or the period, and so "extreme high water" or "extreme high tide" is meant to demarcate that rather than "mean tide level," which is a significantly different level.

DR. SUMAN: So "highest high tide"?

DR. MURRAY: "Highest high tide."

CHAIRPERSON BROMLEY: Okay. Lelei.

MR. PEAU: Mark, on your MPA network slide, I just want to make an observation and perhaps an opportunity. In Group 3's presentation, I think they promote the idea of the regional cooperation. I interpret that opportunities in non-U.S.-affiliated. I just want to make sure that -- if that could be captured so there's some consistency if I do not mistake Group Number 3's regional collaboration.

DR. HIXON: Clarification, Lelei. Are you talking about the use of the word "network"?

MR. PEAU: Sorry.

DR. HIXON: No problem. Are you talking

about the use of the word "network" and meaning of the word "network"?

MR. PEAU: Yes.

DR. HIXON: Yeah. There's definitely an issue here because "network" is such a generic word that it means entirely different things to different people. In the context of this document, we're intending to use it as -- in a strictly ecological context; that is, just the movement of materials and organisms between MPAs. So it would behoove us as a group to come up with terminology that effectively separates that from networking among nations or among governmental agencies or what have you.

Thank you.

MR. PEAU: All right. Thanks.

CHAIRPERSON BROMLEY: Okay. Others? Yes, Dave. Oh, my God. Yes, Dave.

MR. BENTON: I know I'm going to shock you some day and be really short and to the point.

CHAIRPERSON BROMLEY: I love you, Dave.

MR. BENTON: Three quick points. One is on the tidal range issue. I just urge caution in deviating from standardized terms and their application. For example, in Alaska, I think state

waters and -- the delineation between state and federal waters or state and private lands is mean high tide. And as a state with a 20-foot tidal range and 33,000 miles of coastline, that's a big chunk of territory, so we need to be cautious on that. And you might want to think about that.

DR. HIXON: So -- I'm sorry. In Alaska, it's mean high tide; is that --

MR. BENTON: I believe it is.

DR. HIXON: Okay.

MR. BENTON: I'll check that to be sure.

DR. HIXON: Thank you.

MR. BENTON: But it's not high high tide. I can guarantee you that. Or mean high water.

The second question, again, I think I asked this before and I don't -- I didn't see it up there. I don't think it is up there -- but I'm wondering have you -- are you going to consider some kind of criteria that would be used that would de-list some site or -- from the national list or national system? I think we need to approach that issue in some way.

DR. HIXON: We've not addressed that issue.

MR. BENTON: What?

DR. HIXON: We have not addressed that issue.

MR. BENTON: Okay. Okay. And then my third point is in our discussions in Subcommittee 3, and I'm just speaking for myself, one thing that kept cropping up in my mind was we need a clear statement of the purpose of a national system and the problem to be solved; i.e., is this to identify only a discreet subset of habitat areas so that we have a representational system, or is this more than that, that kind of thing? I think that's your guys' province. And I just want to highlight that issue.

DR. HIXON: Yeah. We're working on that for a statement. Thank you.

CHAIRPERSON BROMLEY: Okay. Terry.

MR. O'HALLORAN: Thank you. Mark, on the components of the national system, under the bullet "commercially and/or recreationally important," if I recall, you changed -- it looks like you changed it from "marine resources" to "species."

DR. HIXON: That's correct.

MR. O'HALLORAN: Could you talk about that a little bit?

DR. HIXON: Sure. Absolutely.

MR. O'HALLORAN: I don't quite understand why that changed.

CHAIRPERSON BROMLEY: Briefly. We're out of time.

DR. HIXON: The question arose what we were talking about in our original wording of commercially and/or recreationally important marine resources. And we realized we were talking about living organisms.

So when we reconstructed this general set of bullets that have to do with conserving living things, we simply changed that over to species so that would be added to this list and incorporated in this list.

So the second bullet -- the intent of the second bullet is we're talking about MPAs that can protect different things. And we're listing the sort of important things that may be protected. The second bullet includes the living things that may be protected. So some MPAs may conserve biodiversity in general, which was to address Rod's concern, as well as particular species, and then we list different examples of particular species that we believe are

important to consider.

CHAIRPERSON BROMLEY: Okay. Is that all right, Terry?

MR. O'HALLORAN: Well, I hear what he's saying. I'm not sure if I agree with that.

CHAIRPERSON BROMLEY: Okay.

MR. O'HALLORAN: But I hear what he's saying.

CHAIRPERSON BROMLEY: We -- bear with us one more half hour now because I think we'll -- we're going to provide now some guidelines about how there's still a chance for comment.

If the sense at Key Largo in April was that we haven't made much progress, I hope you don't mind if I think that the sense now is that we've made a great deal of progress. And I want to thank all of you for two and three quarters days of extremely hard work and the chairs have really pulled us along wonderfully and I am very encouraged by where we sit at the moment.

We met -- the Executive Committee met at noon to sort of think about next steps, and Lauren and I are going to try to convey the sense of that. So, in a sense, if you look at your agenda, we are going

to address follow-up for the next meeting, the logistics for the next meeting, and then any other items. So, in a sense, we're into the wrap-up, 4:30. We will adjourn at 5:00.

So, Lauren, would you mind -- we have some dates that we want to give you and then we will back up, talk about what will happen between these dates, and -- and then at the next meeting. So, Lauren, you -- write these dates down as she talks with us.

MS. WENZEL: You can write these down and then I will also e-mail them out.

CHAIRPERSON BROMLEY: Yeah. It will come to you. But this is what we're thinking.

MS. WENZEL: Okay. So, basically, this is the process that the Executive Committee agreed to:

From now until December 1st, the subcommittees will work on their own time frames set by the chairs to produce a final work product from each subcommittee.

Then on December 1st, the subcommittees will submit their work products to the MPA Center and we will post them on the web and make sure you all get them.

On January 20th, all comments from all

members are due. So that's your holiday season.

CHAIRPERSON BROMLEY: The comment period -- December 1st to January 20th is your comment period on all of the work. The subcommittee comment period within your own subcommittee, that takes place between now and December 1st. Okay?

MS. WENZEL: Right. And so all comments are due on January 20th.

And then on the 28th, we will compile all those comments and e-mail them out to everyone so you can all see everyone's comments.

Then during the week of January 31st, the Executive Committee will meet by conference call to just overall review the comments and plan further for the February meeting.

And then the February meeting is the 15th through the 17th in Washington, D.C.

So are there any questions about the timeline? I will e-mail these out. You'll get them all.

DR. HIXON: Excuse me, Lauren and Dan. For the comments, is there going to be some guidance regarding the format of the comments?

CHAIRPERSON BROMLEY: Yes. Go ahead.

MS. WENZEL: Yes. Do you want to --

CHAIRPERSON BROMLEY: Yeah. There are guidelines.

MS. WENZEL: Yeah. Just one second. Okay. Yeah. We'll also e-mail these out. But basically we're going to ask when you submit the comments, that you refer to specific points in the text so that we know what you're talking about. If your comment is general or hasn't been addressed in the text, then say that so that we, when we compile them, we can make order out of all the different folks' comments.

We ask that everybody not just describe what they don't like about the document but make a positive suggestion about how they would like to see it changed, that you include a brief explanation of what your concern is and the rationale for your comment.

And if you just need clarification, then just say that. If it's not a concern but just a question about what something means, just note that. So I think those are the quick guidelines for comments that we came up with and, again, we'll e-mail these out to you, too.

MR. PEARSON: I would like to make a recommendation that any document sent out for comment be sent out as line-numbered PDF files so that everybody is commenting on the same line number on the same page.

CHAIRPERSON BROMLEY: PDF file -- right. Now we're talking.

MS. WENZEL: Okay. We'll do that.

CHAIRPERSON BROMLEY: It will come to you as a line-numbered PDF document and then you make your changes -- you make your suggestions anchored to that. Okay?

Yes, Jacqui.

MS. SCHAFER: Yes. I'd like Lauren to address whether or not the state workshops that had been discussed by the Interagency Working Committee were still taking place in the same time frame. I'm particularly interested in the one that I think was thought about for the West Coast in early February in California.

MS. WENZEL: Yes. That is going to occur in early February.

MS. SCHAFER: Will we be given notices of this?

MS. WENZEL: Yes. Once we get -- once we get those nailed down. We don't have a location. We're still working with the states to identify those dates, but we can let you know about those.

MS. SCHAFER: Okay, for Subcommittee 3 that's of particular interest.

CHAIRPERSON BROMLEY: Okay. Let's -- with these dates in mind, let's now just stop for a second and think about the February meeting. I have a few thoughts for you. Our view is that on that meeting, which is the 15th, 16th, and 17th of February, day one would be devoted to several -- two panel discussions, particularly tribal issues and the other four Fisheries Management Councils we did not hear from. There would be public comment on day one. Our expectation is because we're going to be in Washington, that we will have a rather more extensive demand, perhaps, of public comment.

Then days two and three, for the most part -- all of day two and for the most part day three -- we probably will have a second public comment on day three -- will be devoted to deliberation of the entire report and it is our thinking that we would like to have before you for the February meeting a document

that, even though it does represent the three subcommittee work products, that you'd be able to see it and think about it as one unified presentation of the outcomes.

We will have extensive discussions at that meeting in the committee as a whole. We will -- as I said, we will recognize subcommittee efforts but we will, to the extent that we can, try to help you see how the thing might look after we leave in February.

If there are issues at that time that come up that seem critical to be addressed between then and June, we may appoint workgroups or a new subcommittee. It's quite possible, as we thought, that the subcommittees might cease to exist as you know them at the end of the February meeting and perhaps be reconstituted to address gaps, new issues, what have you.

In February, we would like to be in the position to strive for consensus. We'd like to reduce the possibility of picking apart a document that we've struggled with collectively and individually for a long period of time. So the extent to which we can grasp and think about and endorse the entire work product, that would be marvelous.

That's our thinking about that. I'd be happy to let other members of the Executive Committee elaborate on the points I've just made. Have I missed something, Bonnie?

VICE CHAIRPERSON McCAY: With respect -- we had talked about having Donald Atwood address culture in relationship to things that have not been represented, such as commercial and recreational fishers, divers, and so forth. And I'm wondering if we can fit in a panel of that kind as well.

CHAIRPERSON BROMLEY: If that's the wish of the group, yes, indeed. Okay. Bob Bendick and then Tony.

MR. BENDICK: Yeah. It seems to me that between now and February, there are two tasks and I'm not quite sure who's gonna be doing these. One is to take the three subcommittee reports and integrate them into something that makes sense as a coherent report where the different pieces -- obviously, all these details don't have to be worked out, but so that a framework, how they're going to fit together.

The other is from all the comments that come back, it seems to me there may emerge some sort of critical conceptual or practical issues that are

the key to whether we get consensus or not. And somebody needs to identify those clearly so that when we get there in February, we kind of have a clear list of things to worry about that, and if we can resolve those things, then we have some sort of meaningful statement to make. And if we don't have consensus, then we've got more work to do.

And so those are two tasks that seem like are needed to move us ahead.

CHAIRPERSON BROMLEY: Yes. If I may, the Executive Committee will, in our conference call in late January, after this has come back, we will address those and the subcommittee chairs will help us come to grips with and identify things that are of that nature that must be reconciled that haven't yet been reconciled, and maybe some of those things will be on the agenda for the February meeting.

So, you know, what we're going to get between December 1 and January 20th or whatever that date is, we're going to get feedback to the subcommittees and it is up to the chairs of the subcommittees to take those comments, perhaps interact with their members by e-mail or something, and see if it can be resolved. But if things cannot be resolved,

that represents one clear agenda item for February that will have to be addressed.

And we must recognize that when we leave in February, there may be things that have not been reconciled, that have not been brought to the point where they can be acted upon, and then we'll have to make a decision do we wish to appoint a working group or a new subcommittee to tackle that or hold it off for the next incarnation of this body after June '05. And even if we do appoint a subcommittee, create a new one to address something, the prospects are that they may not be able to reach closure on it. So that then also would be bumped off into the future.

Am I responding --

MR. BENDICK: Well, yeah. I was with you all along until the holding off till the next body.

CHAIRPERSON BROMLEY: Yeah.

MR. BENDICK: I think that would be a mistake.

CHAIRPERSON BROMLEY: Well --

MR. BENDICK: Either -- I mean, we need -- nothing ever happens unless it has to happen. I suppose that's a pessimistic view of the world. I take that back. Without sort of time pressure and an

end point, people tend not to reach resolution on hard issues. So --

CHAIRPERSON BROMLEY: We had evidence of that today, didn't we? Yes.

MR. BENDICK: I think it ought to be a goal that we drop -- we don't have it in our minds to give the hard problems to somebody else.

CHAIRPERSON BROMLEY: Well, that somebody else happens to be us.

MR. BENDICK: Well, --

CHAIRPERSON BROMLEY: But, look, I agree with you.

MR. BENDICK: Okay.

CHAIRPERSON BROMLEY: The point is we will try our level best to have a complete and comprehensive document, but I do not want to rule out the possibility that there is some issue, some definitional issue or something else that remains contentious. Then in February, we'll have to decide. Do we wish to have a minority report on that, or do we wish to hold it off? I am not urging that we create lots of stuff that will then be addressed after June '05, but I think we must recognize that there might be a possibility that one or two issues call for

that kind of action. But we don't need to decide that now.

I have Tony and then -- well, Bob, do you have other follow-up?

MR. BENDICK: No, no. That's it for me.

CHAIRPERSON BROMLEY: Okay. Tony.

DR. CHATWIN: Thank you, Mr. Chairman. I just wanted to put this out there for consideration of the Committee. I find the presentations and the panels that we have extremely informative, and -- all of them -- all of them we've had to date have been extremely informative. I think because I heard that we're going to have more input from fishery councils and we're now -- consideration of having input about recreational and commercial fishing culture, I think we shouldn't deprive ourselves of the opportunity for getting input from some of the existing systems of MPAs out there. And I think always that we hear comments from people like from the Fish & Wildlife Service, you know, site managers, those people who deal on a day-to-day basis on the issues that we are trying to craft recommendations for.

So I think there's the National Park Service, there is National Wildlife Refuges, National

Marine Sanctuaries -- I think we should consider getting some more input from those and maybe another panel at some point.

CHAIRPERSON BROMLEY: Yeah. We can never have enough input, and -- so -- yes, David.

MR. BENTON: It's along the lines of the comment I was going to make and then a question for yourself. I'm a little concerned -- I fully appreciate you cracking the whip and the need for an aggressive schedule to try and get this wrapped up, and I think your timeline works. I'm a little concerned that the number of panel presentations that we might have at the next meeting is going to conflict with the workload that is assigned to the next meeting, and adding more panels than even the ones we've talked about here becomes even more of a problem in that regard. And I'm not saying that's a bad idea, Tony. But I'm just flagging that, Mr. Chairman, because I think it's going to make your task and our task very difficult to get that -- to meet that schedule, and we may want to think about those implications.

And, secondly, the question -- the other question I have for you is in listening to your

description of how we're going to try and reach closure on a document, am I correct in hearing you say that what we're going to do in February is we're going to come there with both the sort of completed work assignments from the subcommittees and somebody will have a synthesis document and it's your intention for us to try and get final approval at that point or conditional approval and having a document -- because I'm assuming there's going to be changes made at that February meeting, and that at the May meeting we would have a final document for final approval.

I'm just wondering -- could you explain that a little bit more to me, please?

CHAIRPERSON BROMLEY: Well, I guess the explanation I would like to offer is that it would be wonderful if we could in February reach agreement on, dare I say, pieces and substantive sections of something. I'm extremely reluctant to put this off and do it in -- all of it -- and do it in May. And so if it means that we tackle pieces of it, that's why I've been pushing to get the subcommittees to give us precise recommendations about what they think about things, the glossary, what have you. I'm very reluctant to let a lot of this slide until May when in

our -- if we then come to tackle things and find ourselves stuck and wish we had more time, we're in bad shape.

So I, you know, haven't done this before, so I'm still feeling my way, David, but that's my thinking.

MR. BENTON: Mr. Chairman, I think your approach of trying to reach closure on certain key components and maybe some of the -- and maybe the big issues in February is appropriate, quite appropriate. And to the extent we can get as close to finished as possible, then that's right.

I guess what I was -- where my mind was sort of drifting off to was even then, there's going to be -- somebody's going to go back and do some more writing so that they -- there will be a document, sort of a final draft document, that we would work from at some point so that when we walk away and we finally say, "That's it," whoever goes off and does the final cleanup, they don't have to come back to us. We're done, that we actually -- that there's a crisp decision.

And that may have to be in May if -- because -- at some point it will be -- I for one am

one of those folks -- I like to look at the whole package before I give my final seal of approval, and I think there's a lot of people around the table here that are going to feel the same way.

CHAIRPERSON BROMLEY: And it is our intention to have the whole package in February, the whole package. Okay?

MR. BENTON: Yeah.

CHAIRPERSON BROMLEY: And -- okay. Jim Ray, Bonnie, Max, Barbara Stevenson. Okay. Yes. Jim Ray.

MR. RAY: I guess I just wanted to share the same concern I think Dave just mentioned a second ago, and that is I think the panel discussions we've had have been extremely informative especially, for example, at this meeting with a lot of the very region-specific issues that a lot of us weren't familiar with.

But I'm getting concerned as to when -- the time we have in these meetings, you know, every time we add another two or three hours in for panel discussions, that's less time we have to interact with each other to wrestle with these issues, and I'm just concerned, you know, we're talking at the next meeting

about, you know, having recreational fishing and things of this sort. We haven't even talked about some other stakeholders, like oil and gas, who I represent, and I should -- I'm definitely not suggesting that we have a panel for oil and gas and talk about their culture and what we're concerned about.

But trust me, we've been involved with and affected by marine protected areas for a long time so, you know, we're in the game, too. But I just -- I just want us to be sure we've got the right balance so that we can get our -- we've got enough time to get our work done when we're together. So I just -- I had a little concern there.

CHAIRPERSON BROMLEY: Yeah. I have, too. Bonnie.

VICE CHAIRPERSON McCAY: Well, I share that concern and I also listened to this -- I guess it was Dave or somebody brought up the idea of the need to really learn more about existing MMAs or MPAs. And on one -- and it seems to me that certainly if we do invite people from recreational, commercial, and other areas, we could make sure they are people who have that kind of experience and that they speak about it.

The same thing applies to the councils, that they would be invited to talk about their use of area-based management and MMAs, so we could learn from them.

I do think we have a lot to learn from them.

CHAIRPERSON BROMLEY: Okay. Max.

MR. PETERSON: Mr. Chairman, I appreciate the fact that you're trying to put together a schedule for us, which I think is extremely important. I think we have to have time deadlines. Let me piggyback on both Benedict's comments and David's. I would think that somehow we've got to have one document for the next meeting because I don't think it's just an assemblage of the three subcommittee reports.

Now, whether that's a professional writer that does this or whether it's the MPA Center, somebody's got to put together a document that has some kind of common format, that several of us address the same thing, somehow collect that, but it seems like that has to be done.

If we meet as a group as a whole in February, it will just be a circus unless we can get a document. And then it would seem to me, Mr. Chairman, that we need to get as much agreement on a document as

we can in February so that there's very little cleanup work between that and May, and I'm assuming that you're going to look for final approval of the final document at the May meeting.

CHAIRPERSON BROMLEY: That's correct. Yeah.

MR. PETERSON: Okay. But, anyway, I would be pretty brave and say we ought to trust to the Executive Committee and a professional writer or something to put together a document that makes sense if you read it from stem to stern, and I don't think we can do that as a committee as a whole. Okay. That's --

CHAIRPERSON BROMLEY: I'm --

MR. PETERSON: Okay.

CHAIRPERSON BROMLEY: I'm committed to that. We will have, to the extent I have anything to say about it, you will have a document that looks like that. You may not like it, but it will be there. Okay?

MR. PETERSON: Thank you.

CHAIRPERSON BROMLEY: And, you know, it may mean that we produce two documents because I think there is some -- perhaps some subcommittees that would

like for their pieces to remain identifiable. I think I picked that up. But I will work with the MPA people and with others to produce a document.

Yeah, please, yeah.

MS. WENZEL: I just wanted to clarify about this synthesis document which absolutely needs to be the final product and the challenge of going through a substantive review at the next meeting, and I just wanted to note that folks from the Executive Committee wanted to make sure that members would recognize the same document at the meeting and that that wouldn't slow us down in trying to look at a new document. But we absolutely agree that we're going to get to a synthetic document but we may need to resolve the substantive issues first, if there are any.

CHAIRPERSON BROMLEY: Thanks. Okay. Barbara, Tony, and then Steve.

MS. STEVENSON: I have a suggestion that might help in freeing up time in February. We had council presentations today.

CHAIRPERSON BROMLEY: Speak up, please.

MS. STEVENSON: That's not usually my problem.

CHAIRPERSON BROMLEY: I know.

MS. STEVENSON: Can you hear me now? We had council presentations at this meeting which were very helpful and very interesting. I'm not suggesting that we eliminate the other council presentations but that we have them in the May meeting where they can give us both comments on our final draft, which might be very helpful from their perspective, and if I understand correctly, that our next task will be a more ecosystem type thing -- perhaps we could ask them to make their presentations dually to both of those to help us get onto our next task and we finish our former task.

CHAIRPERSON BROMLEY: Thank you. Okay. Tony.

DR. CHATWIN: Thank you, Mr. Chairman. I'll be brief. I think Barbara's suggestion is a very good one. I'm the one who wrote this up, and I agree that we should not take the time of this committee -- the time that this committee could spend deliberating and turn that into panel discussions.

I think -- so I totally support the suggestion that Barbara made. I'm going to make another suggestion that might -- I don't know how this is going to be received, but at this meeting we have

had a lot of input on culture, and by no means have we had all the input that we need. However, we do also have a lot of -- there are a lot of other aspects of MPAs that we need and, in particular, I'll go back to this looking at existing systems, getting input from existing systems, and I would -- I would put it that maybe we consider, being that it's in D.C. and there is a number of agencies there, that if we have one panel discussion, that we have that panel discussion on that subject matter as opposed to on recreational and commercial fishing culture, which we will get more of in the council -- some more of, not like we had today, but in the following meeting. So that's my suggestion.

CHAIRPERSON BROMLEY: Okay. Steve Murray and then Dolly.

DR. MURRAY: Dan, just a point here. With regard to the written product that we would be looking at at the February meeting, I think there's been some suggestions that there may be a need for some kind of an introductory piece of some sort. Is there a provision to try to generate that in time for that February document reading? If so, who's going to do it?

CHAIRPERSON BROMLEY: Both ways. We've thought about doing a preamble or an introduction or something, and then we thought, well, maybe the right time to write that is afterwards. So I think our mind, I believe, is still open on that, Steve.

Dolly.

DR. GARZA: Thank you, Mr. Chair. My little list keeps adding along here. Going backwards, I think that's a very bad idea. We invited the Northwest tribal people to this meeting and then we said, Oh, sorry, that isn't going to work and then we tentatively said, You're going to be coming to D.C. and now we're going to say, Well, we really don't want you. That's not appropriate.

The idea of the council at the May meeting in Maine I think is an excellent one. These have been long three days and the panels were important. They did take us away from our job, but they were also important diversions because we can only look at those pieces of paper and duke it out with each other for so long before we just kind of fall over and get tired, and so those panels do serve another purpose there.

But in terms of the May meeting and the February meeting, I would like to just emphasize as

much as I can that once we set these dates for February, that they not be changed. I spend three weeks out of my month from now until June traveling. And if you change them by one week, then I will be out.

And I want to, if possible at this time, set the dates for the May meeting because I'm scheduling into June right now.

MS. WENZEL: They are set. I'll send them out again.

CHAIRPERSON BROMLEY: Thanks. Let me say, Dolly, we --

MR. O'HALLORAN: When are they?

MS. WENZEL: I'm afraid to say off the top of my head. But they're mid-May. I'll send them out again.

CHAIRPERSON BROMLEY: Your point about tribal people is right on and that is one promise to the first peoples we will not break.

DR. GARZA: Okay. I have an e-mail or part of an e-mail from you, Lauren, that said February 15 to 17 D.C. and then spring meeting is May 17th to 19th?

MS. WENZEL: That's correct.

DR. GARZA: And then at the Seattle meeting, I sort of got some feeling that those dates were changed or perhaps this was what it was changed to.

MS. WENZEL: Those are firm.

CHAIRPERSON BROMLEY: Those are firm.

DR. GARZA: Okay. So then it's May 17th to the 19th in New England and you're saying Maine -- Portland, Maine. Okay.

CHAIRPERSON BROMLEY: Our invitation to the tribal people does stand.

DR. GARZA: Thank you.

CHAIRPERSON BROMLEY: Dave.

MR. BENTON: Mr. Chairman, I was going to say exactly what Dolly said. You've already answered the question. And I was going to also say that with regard to the meeting -- the tribal meeting -- that definitely needs to happen in Washington as we set it up. I can't see it being any other way.

And the council can be in May and that won't hurt a darn thing.

CHAIRPERSON BROMLEY: Okay.

MR. BENTON: And so --

CHAIRPERSON BROMLEY: Thank you for that.

Okay. George.

MR. LAPOINTE: I'm gonna echo the comments of Dave and Dolly, that -- well, I'm going to change them a little bit. I don't want to have panels in -- I don't think it will be productive to have panel discussions in May because we'll be finishing our report. The message it will send to people is, you were window dressing.

If we're having panels, we have to have them early enough so that in fact we can consider the comments of the people that are discussing issues with us. Otherwise, we shouldn't have them at all. That would be my opinion.

I think holding them late is -- would be not productive for our deliberations and it would send a terrible message to those panel members.

CHAIRPERSON BROMLEY: Wally.

DR. PEREYRA: My comments.

CHAIRPERSON BROMLEY: All right. Steve.

DR. MURRAY: God forbid, but perhaps an additional day of meeting time?

CHAIRPERSON BROMLEY: An additional day in February?

DR. MURRAY: Yes.

CHAIRPERSON BROMLEY: It's possible. Nighttime meetings.

DR. CHATWIN: With breaks.

CHAIRPERSON BROMLEY: Okay. Those are things the Executive Committee's going to have to work out. What do you think? Are you tired? Tony?

DR. CHATWIN: Just a point of clarification with this issue of the panels. Are we now talking about two panels, one for commercial and recreational fishing culture and one for traditional, tribal? Is that -- because --

CHAIRPERSON BROMLEY: The --

DR. CHATWIN: -- I was commenting on recreational and fishing -- recreational and commercial fishing culture, which is very different to a tribal panel, and so that is my concern, not the tribal.

CHAIRPERSON BROMLEY: The Executive Committee will take those views under advisement with the promise that the tribals will not be hurt. Lelei.

MR. PEAU: Mr. Chair, I don't know if you're going to discuss the issue on the comment on ground rules for comments.

CHAIRPERSON BROMLEY: On what?

MR. PEAU: What we discussed at the Executive Committee.

CHAIRPERSON BROMLEY: Ground rules.

MR. PEAU: Yeah.

CHAIRPERSON BROMLEY: For comments.

MR. PEAU: For comments.

MS. WENZEL: Did you have a comment, Lelei?

MR. PEAU: Oh, no, no. I was just reminding the Chair that we did discuss about that during the Executive Committee, that we recommended to have some discussion on that here.

MS. WENZEL: Oh, okay. Yeah. I had just briefly gone over them, but you're right. I didn't invite any comments. So do people have comments on the ground rules in terms of how to manage comments?

CHAIRPERSON BROMLEY: Comments on ground rules or comments? And it's after 5:00. We --

DR. HIXON: Just something quickly. Just something quickly. I thought we had decided the comments should be sent to the MPA Center directly.

MS. WENZEL: Yes.

DR. HIXON: Okay.

CHAIRPERSON BROMLEY: Okay. How are we

doing? Is it time to go?

MS. WENZEL: Move to adjourn.

CHAIRPERSON BROMLEY: Okay. We have some other logistical things. Go ahead, Lauren.

MS. WENZEL: Okay. We're onto logistics. We're in the home stretch here.

I have here a carpool list. If you have any questions about it or want to check it or change it, just come up here. It will be here.

We've been asked to go ahead and go to the sanctuary, you know, by around 5:30 and it's about 15 minutes from here -- because of sunset, and they don't have a lot of lighting. So after sunset, it's going to get dark and then you'll get to stand around and look at the moonlight.

So I just wanted to let you all know you have a map in your packets. Okay. You have a map in your packet to the reception. It is at 726 Kehai Road, and it is a little bit easy to miss, as I mentioned. There's a -- the sanctuary building, there's a small sign that says Education Center. It's sort of angled away from the direction you're coming, so you need to just slow down as you pass by this park, Kalepolepo Park. The sanctuary office is a two-

story blue wooden building and there's a sign that says Education Center. So just look out for that.

I believe there's an apartment building or a building that says Kehai Surf on the right, and the sanctuary office is on your left.

Okay. So -- yeah, so just -- that's right. Please hook up with the folks that you've said you're going to carpool with and you can make your way down there.

I have a couple other things quickly.

CHAIRPERSON BROMLEY: Please don't leave. We have critical things for tomorrow maybe.

MS. WENZEL: Right. Tomorrow, the bus is going to leave from out front here to take us to Lanai to depart on our field trip, so we'd like to gather at 8:45. The bus will leave at 9:00 and you should plan for a day at the beach. So bring, you know, towel, hat, whatever you think you need. I've been --

DR. OGDEN: Sunscreen.

MS. WENZEL: Sunscreen.

CHAIRPERSON BROMLEY: No sunscreen.

MS. WENZEL: Well, I don't know. Now I feel bad about the sunscreen. There are -- you can wear a swimsuit or you can change. There's a place to

change on the boat and at Lanai. The Jeep Adventure folks are going to go to a gift shop if you need to get souvenirs for your families.

I think that's pretty much it for the field trip. We're going to be back at the dock around 6:30 and back at the hotel around 7:30.

CHAIRPERSON BROMLEY: Does the boat have wetsuits? Will it be like the Florida Keys?

MS. WENZEL: They're going to provide snorkeling gear and they're providing, you know, meals, snacks. You might want to bring some extra water but, otherwise, we should be well taken care of as far as food.

Any other questions about the field trip?

Okay. And then I just have one last announcement. Terry has let me know that there's an opportunity to go on a submarine ride run by a company called Atlantis for a special rate of $20. So if anyone is interested in doing that, if they're staying a little extra time and they want to do that, they can see Terry and he will give you the contact information and all you have to do is say that you're at the NOAA MPA meeting.

DR. PEREYRA: Will there be snorkeling

opportunity tomorrow for people who go on the Jeep tour?

MS. WENZEL: Yes. Yes. The way the field trip is working is we'll all go over together, we'll snorkel, and then folks who signed up for the additional activities will have an opportunity to do that and folks who want to just lie around on the beach and snorkel can do that as well.

Okay? That's it.

CHAIRPERSON BROMLEY: Okay. Lauren is going to adjourn us.

MS. WENZEL: Okay. Going once, going twice -- we are adjourned.

CHAIRPERSON BROMLEY: Thank you.

(The meeting was adjourned at 5:12 p.m.)