11.10.08 PAD Field Trip

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# EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

**Fourth Floor Conference Room**
**645 G Street**
**Anchorage, Alaska**

**PUBLIC MEETING**

**ON**

**FY2000 DRAFT WORK PLAN**

July 15, 1999
7:00 o'clock p.m.

**PARTICIPANTS:**

Mr. Chuck Meacham, Chairman, Public Advisory Group
Ms. Molly McCammon, Executive Director, EVOS Trustee Council
Dr. Robert Spies, Chief Scientist
Ms. Rebecca Williams, Executive Secretary, EVOS Staff
Ms. Sandra Schubert, Director of Restoration, EVOS Staff
Mr. Hugh Short, Community Facilitator, EVOS Staff
Mr. Dan Hull, Public Advisory Group
Mr. Dave Cobb, Public Advisory Group
Ms. Brenda Schwantes, Public Advisory Group
Mr. Jim King, Public Advisory Group
Mr. Ed Zeine, Public Advisory Group

**TABLE OF CONTENTS**

**PUBLIC TESTIMONY**

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

(On record - 7:00 p.m.)

CHAIRMAN MEACHAM: Good evening, I would like to open the public hearing on the FY2000 Draft Work Plan. And what sites do we have on line at this point?

MR. KOPCHECK: Yes, good evening, this is R.J. Kopcheck, I'm calling you from Cordova, I'd like to testify, please.

CHAIRMAN MEACHAM: Okay. Just a moment R.J. Are there any other sites on line?

MR. THOMAS: Yes, good evening, this is Gary Thomas and I'm in Cordova also and I'd like to testify this evening.

CHAIRMAN MEACHAM: Thank you, Gary. Any locations other than Cordova?

(No audible responses)

CHAIRMAN MEACHAM: And how many individuals here would like to testify? Two, okay.

All right. We'll begin then and go ahead, Cordova and Mr. Kopcheck.

CONFERENCE OPERATOR: Rebecca?

MS. WILLIAMS: Yes.

CONFERENCE OPERATOR: Could you give me your phone number, please? This is the conference operator.

MS. WILLIAMS: 278-8012.

CONFERENCE OPERATOR: Thank you so much.

MR. KOPCHECK: Okay, good evening, this is R.J. am I back on now?

CHAIRMAN MEACHAM: Yes, go ahead, R.J.

MR. KOPCHECK: Okay, thank you very much. My name is R.J. Kopcheck and I live in Cordova, I've been a resident here for 25 years. I'm a commercial fisherman here and I recently went to work for the City of Cordova as the City Planner. I'm fairly well informed on issues relating to fisheries, fisheries management and the ecosystem as how critical certain links are in our food web relating to both fisheries management and relating, as well, to sea lions, seals and other marine mammals.

I would like to, this evening, speak in favor of a proposal that's been offered to you from Mr. Gary Thomas and Mr. David Shield, relating to an investigation of interaction of both herring and pollock and sea lions and other consumers in the Sound. It's a valid proposal, I think it's real critical and important to our ability, locally, to continue to look at the resources and to manage them. Fishing is the life blood of Cordova, it has been for 100 years and we have nothing else in our future but commercial fishing to provide this community with a livelihood. These kind of researches are directly related to our ability to manage those resources, both for their own well being and for the well being of the economy

of the community.

And this proposal fits, so I have to ask you folks at the public council there, at the review council, to do your best to talk to the Trustees about this proposal and let them know that it fills a real need locally and I think it has been unfairly judged without, I think, consideration of its local need applicability.

So that's what I would like to speak to this evening. I see that there are concerns relating to non-science issues in the science director's review of this proposal and I would hope that the public committee would ignore issues relating to finance. I don't think the Trustees get to set caps on costs for salaries or performance, and that's another concern of mine. This is good science and it shouldn't be left on the wayside, and we desperately need it to start this year.

So I think that just about ends my comments, I'd be happy to answer any questions anyone has relating to (indiscernible - lowers voice).

CHAIRMAN MEACHAM: Thank you, Mr. Kopcheck. There is a question. Dan.

MR. HULL: R.J., are you talking about the overwinter foraging and ecology of injured marine pipavords in Prince William Sound?

MR. KOPCHECK: Yes, I certainly am. I'm sorry, I didn't specifically read that in and, yes, I am specifically

addressing that proposal.

CHAIRMAN MEACHAM: That's proposal 557BAA?

MS. McCAMMON: Uh-huh. (Affirmative)

MR. KOPCHECK: That's correct.

CHAIRMAN MEACHAM: Thank you.

Dan, did you have any other questions?

MR. HULL: Not right now.

CHAIRMAN MEACHAM: Any others?

(No audible responses)

CHAIRMAN MEACHAM: Thank you very much.

MR. KOPCHECK: Thank you very much for taking my testimony.

MR. KOPCHECK: Next person in Cordova, please.

MR. THOMAS: Yes, this is Gary Thomas and I was one of the co-PIs on the overwinter foraging and ecology of injured marine pipavords in Prince William Sound and the effects of winter food limitation on recovery. I co-authored that proposal with David Shield, that's 557BAA.

I received all the reviewers' comments and went through them and I've actually sent the Chief Scientist some rebuttal on some of the information. And what came out real clearly is that the reviewers didn't really appreciate the significance of the overwinter surveying capability. The literature on our declining sea lion populations and declining harbor seals and year populations in the Pacific Northwest -- or actually the

North Pacific Ocean, have almost exclusively been done in summer months. And this is in spite of real good knowledge that overwinter survival is probably one of the most critical aspects in the process of these fish-eating predators to be able to forage successfully and what they forage on in the winter is a critical process to understand. There's no information on this.

It was real clear that the peer reviewers didn't understand that the wintertime situation in Prince William Sound where these predators are aggregated on concentrations of herring and pollock, it is a much simpler forage scenario than during the summer. During summer months, spring through probably early fall there a trem -- the nearshore assembly to fish that are available as forage to these sea lions, seals, killer whales, the whole gambit of these nearshore predators, is -- the assemblage is very diverse. There's basically in the spring -- there's the migration from depths up to the nearshore areas by several different -- just a whole array of different species which become available to mammals and birds to feed on.

However, in the winter it's really different. Most of these species that are available during the winter are now down at depth and as a result birds and mammals have to focus -- the ones that are feeding on fish have to focus their time and energies finding these real large aggregations of overwintering fish, like the pollock and the herring. And after six years of

winter surveys in Prince William Sound, we have a real good idea where these fish are distributed, the herring and the pollock are distributed, and we've made a lot of casual observations on just the overwhelming numbers of different species, the predators, the whales, the birds, the sea lions and the seals, feeding on really large aggregations of Pacific herring.

In contrast our casual observations suggest in areas where you have maybe four to five times the biomass of walleye pollock, we don't see an abundance of predators feeding on them. In fact, we don't see very many fish predators anywhere else but on these very large concentrations of herring. This is not documented in the literature. It's a very little -- a poorly understood phenomena, yet probably every fisherman and everybody that has been involved in the herring fall, winter and early spring state fisheries knows that this is just a phenomenal event that occurs every year. And it's something that has never been documented, and after six years of acoustic surveys out here we've developed the -- probably the only area in the North Pacific where we really understand the forage fish abundance and distribution and what the animals are really focusing in on.

So I'm just -- I sent the rebuttal comments to the Chief Scientist and I'm looking forward to some response, but the initial recommendation was not to fund it.

CHAIRMAN MEACHAM: Okay, thank you, Gary. Any questions of Gary? Yes, Ed.

MR. ZEINE: Yes, this -- Gary, this is Ed. I'm looking at the comments on the spreadsheet here and one them -- I have two questions for you. One is that the Chief Scientist felt that the -- what information you would develop would not be dependant enough to be used and also he spoke to a large amount of money in the senior salary basis. Do you want to speak on those two specific items?

MR. THOMAS: Yes. And I have extensive comments in my rebuttal. The first, though, I'll take on is the statement that our information would be incorrect. Well, you have to understand that most of the marine mammal research that's being done at the Alaska SeaLife Center, at the University of Alaska-Fairbanks, Marine Mammals Consortium, are all process experiments. They try to understand how individuals feed and survive on certain diets. There's very -- in fact, I don't know of any studies in the environment where they've actually measured the -- and known the population size and distribution of the forage fish that these animals -- that the populations are responding to. So it's a line of research that hasn't been conducted because it's very difficult to do. They need the new acoustic techniques that allows the survey of the forage animals and they need to couple those with traditional sampling techniques to do population assessments

and counts of the bird -- of the predators, the mammals and the birds.

Now, this isn't indirect information, this is direct measures of abundance and distribution. It's stuff that can be put into hypothesis testing and yield results. Process experiments, on the other hand, are very difficult to put into statistical framework and make decisions with because they're usually -- when you put a videocamera or a tag on a single animal all you do is get one point, and they're very expensive efforts. And what most of the reviewers have said is that, you know, they're familiar with process but unfamiliar with the opportunity we have out here to do the population levels experiments. And you really need to have both the process experiments and the population levels understanding to really make -- to ever get to any conclusion on any of this research and, hopefully, in the future we'll get these two, the sort of ecosystem and population level information, coupled with the process experiment, but it's a real challenge to get the researchers to cooperate and the sponsors to fund this.

And, on the other hand, nobody has done this really in the summer and we've actually developed the techniques where we're going out in the winter when nobody has gone out before and looked at this process. And so -- because we're fortunate, we're right here onsite, we don't cost anything, nobody has to fly in to do the research at this location, we can take

advantage of windows of good weather during December, January and February and we can go out and in about six hours be on the grounds and doing these studies. And so we've developed the techniques, we have historical background and we understand the problem from the fact that we've been out there and watched it. And several marine mammologist that we've talked to are extremely excited about future collaborations on this.

CHAIRMAN MEACHAM: Okay. Thank you, Gary.

MR. ZEINE: Thank you very much, Gary.

CHAIRMAN MEACHAM: Other questions?

UNIDENTIFIED VOICE: Maybe he wants to -- he didn't address the large amount of senior salary.

CHAIRMAN MEACHAM: Gary.

MR. THOMAS: Yes.

CHAIRMAN MEACHAM: Do you want to address the large amount of -- apparently large amount of senior.....

MR. THOMAS: Oh, the PI salaries, yes.

CHAIRMAN MEACHAM: .....senior salary?

MR. THOMAS: Several of the reviewers said that there were too many -- too much principal investigator's salary in the budget. Well, first, I have two and a half months of salary per year in this budget and David Shield had four months. In looking at that, that amount of time, to do this kind of work is very minimal. Now, as far as the salaries, our salaries are directly comparable to that of any of the

universities and that's how our board of directors at the Science Center set salaries, establishes them. And so we're not out of line with the universities as far as total amount. And the amount of time that we have in these projects is minimal to get the job done. What is different about the kind of projects that we're doing is that when you hire the Science Center to do the work you get the experts, we don't have graduate students and we don't have trainee on this, we have a bunch of professional people that are highly skilled, so there's no start-up time, we can go out and get things done quickly.

And the comments were relatively unfair because if you look at our lower indirect cost rate that we have on our proposal, the fact that people don't have to fly in and commute to the research location, the fact -- you know, many other factors that come into the equation, the Science Center is very competitive as far as costs.

CHAIRMAN MEACHAM: Thank you, Gary. Dan.

MR. HULL: Yeah, for my benefit, Bob, if you set aside the issue of cost effectiveness, what do you see would have to change in the study design to make it a project worth considering.

CHAIRMAN MEACHAM: Dan, we're going to talk about these projects as a group tomorrow.....

MR. HULL: Okay.

CHAIRMAN MEACHAM: .....and it's probably better to address it then and we'll just take the testimony tonight, unless you have a very brief response?

DR. SPIES: Well, I'd have to look at the comments again. We have a -- in case people don't understand how the process works, we have a panel of experts that get together, a core peer review team, we bring other people from the Outside. In this case we have two or three different reviewers and those result -- the comments there reflect the advice of the peer review panel, so I'd have to go through the individual comments and see the rebuttal that Dr. Thomas has provided us. I don't want to give the public the idea that this was not a good proposal, it was a good proposal. It has some weaknesses which we felt we should, at least, identify for the, whether they think they're fair or not, for the proposers. It is a public process and we do have many excellent proposal, we can't fund them all, this just came out a little bit lower on the scale. Not that the program is not important. Not that their people are not professionals that do good work, it just came out a little bit lower priority than some of the other ones.

MR. HULL: Okay.

CHAIRMAN MEACHAM: Thank you. Other questions for Gary Thomas in Cordova?

(No audible responses)

CHAIRMAN MEACHAM: Thank you very much, Gary.

MR. THOMAS: Thank you very much for the opportunity to give public testimony.

CHAIRMAN MEACHAM: Okay. We'll have our next person in Cordova.

(No audible responses)

MR. ZEINE: I believe there were only two, weren't there?

CHAIRMAN MEACHAM: Just two? Any other individuals in Cordova that would care to testify?

(No audible responses)

CHAIRMAN MEACHAM: Okay. Hearing none, do we have any other sites, besides Cordova, that are on line?

(No audible responses)

CHAIRMAN MEACHAM: At this point, then, we'll take testimony from the individuals here. Do we have a list of names?

MS. WILLIAMS: We just have the two.

MS. McCAMMON: Just John French and Grant Baker.

CHAIRMAN MEACHAM: Okay.

MR. FRENCH: And we watched each other sign up, so we know which one if first.

CHAIRMAN MEACHAM: You know which one is first.

MS. McCAMMON: You can just testify right here,

Grant.

MR. BAKER: Okay, thank you.

CHAIRMAN MEACHAM: Please state your name for the record.

MR. BAKER: My name is Grant Baker and I work at the university, I'm a professor at the university and I'm also a commercial fisherman in Prince William Sound. And I'm here to talk on two issues, and I'll try to be very brief.

The first one is the proposed GEM Working Group. I think there's about 20 or so people that are listed as scientific -- in the scientific coordinating committee that initially invited participants. I think that a lot of the HJR12, the resolution supporting endowment of chairs, at least endowments at the university by -- it was strongly supported by the Legislature and signed by the Governor and also the support from the public on this, I think there should be some representatives on the GEM Working Group from the university. It is the main research institute, it's got the land, it's got the sealife facility. There's some connection to a lot of the facilities that are doing research already in the marine sciences. And not including them just doesn't make much sense.

It seems like having a group -- having a representative from the university on the Scientific Coordinating Committee and even a subgroup with three or four people from the university on there to address the research needs makes a lot

of sense and, in fact, I see it as a big void that's needed immediately to be put on here, before it gets approved on the Work Plan for fiscal 2000.

I know there's public comment that can happen afterwards, develop the -- on the management and spending plan for the $115,000,000 that's been designated for research, but the way that that plan is set up is by the GEM Working Group and that's why the university should be on there from the very beginning, to satisfy the intent and purpose of it.

The second thing is, I wanted to comment on the proposal that I sent in, and this is not about, you know, having -- although it's going to be denied is not any big deal to me. It was there to show -- to be there as work plan or as an example that people could hold up, and they have done it in the past, just say, hey, these things are needed and it'll look good for the long-term type of plan. And that's why they're there, just something, just some place to start from. But one of the comments was that the -- the proposal kind of focused on the oil spill clean-up technology and that's not really part of the oil spill settlement funds. And it just seems kind of at odds there, that the oil spill settlement funds will not allow development of oil spill clean-up technology.

And about a couple of weeks later, I picked up a newspaper and, lo and behold, here's a new bacteria they developed, maybe the new animal it's titled, the title is

"Bacteria May Be New Animal Against Oil Spills; Microbes May Be the New String of Bacteria Able to Battle Oil Spill." And one of the comments the developer put on here is, I'd love to have been able to spray this in Prince William Sound. I mean this is the type of clean up technology that I'm -- that's exactly the type that, I think, should be developed to help clean up what's already out there. There's oil in the sea bed, there was a study earlier this year, I believe, that the leaching of the oil into the Prince William Sound was not from old spills, but from the Exxon Valdez oil spill. How widespread that oil is is unknown and how to clean it up is even more unknown.

Protecting the Sound, one way of doing it that the Trustee Council had done was to purchase land, they feel that that protects -- that is habitat protection. Well, if an oil spill happens, you're not going to be able to protect that newly purchased habitat, you'd still need mechanism to clean it up. And so new oil spill clean-up technologies can clean up the old oil and can clean up the new oil, too, and it shouldn't be excluded just because it can do both.

My in-laws just came back from Prince William Sound, they shrimped out there for over 30 years. It declined right after the oil spill and went to almost nothing. They went out, just got back about a week ago, and they went out to their areas that they normally always get shrimp and they came up with nothing, they've just completely gone. And so there's a

mystery about what's happened to that shrimp. So there's something going on down there and it seems to be connected to the oil spill.

Anyway, that's all I have to say and I'm opened to questions if anyone has any?

CHAIRMAN MEACHAM: Questions? Dan.

MR. HULL: Did some of the -- you said that your proposal is maybe a working draft, something to start with. That's kind (indiscernible - away from microphone) did you get comments back that would help you to refine it in such a way (indiscernible - interrupted).....

MR. BAKER: Not really. The comments are -- what my plan is, was it proposed, basically, endowment of one chair per restoration center to try to get the mechanism down and to get through all the loop holes and whatever is needed to figure out how to establish endowments. But that's kind of being done by the GEM, only on a larger scale. So it's being taken care of, it's -- you know, it's being taken care of, I suppose, through it, but it still needs to have the university (indiscernible). In the past I remember that the proposal would be held up, you know, it had three links in it, one's research and one is distribution of information and the other one is educational. And these are the same kind of links that have been stressed by the Trustee Council as necessary. And so I'm not so concerned that that was denied, but the basis for it

was emphasizing oil spill clean-up technology, which I don't believe it was, but that was one aspect of it. But for the oil spill monies not to be able to -- for them to exclude oil spill clean-up technology just seems to be excluding the exact thing that's needed. Anyway, that's.....

MR. ZEINE: Earlier today, I learned anyway, that as GEM is developed there may be an opportunity for identifying endowed chairs for specific part of that, what do you think of that?

MR. BAKER: I don't think it will work that way. I think you're developing the criteria for examining what's needed and then going out and seeing how something fits. But you aren't including the people that are most closely related to what's available as far as the land, the research centers, the marine fisheries. Why not include those? You include the other State agencies, the university is a State agency, why wouldn't that be include, especially since it's the main research institute in the state and the funds are -- 115,000,000 is designated mainly for research and that's why it should be on that group from the very beginning, I think it would streamline the process, you wouldn't have double backing all the time, you know, you'd have the other State agencies doing something and then trying to go to the university and see what could happen there, seeing what's possible or seeing what facilities could be used. If you have the agency right there

in the discussion everything is going to be taken care of in one stroke, I suppose, instead of having to go back and redo things.

CHAIRMAN MEACHAM: Bob, did you have a question?

DR. SPIES: Yeah, I have question and a comment. Is Cordova still on line?

(No audible responses)

DR. SPIES: I guess not. Earlier when you said that.....

MS. McCAMMON: Somebody just coughed.

CHAIRMAN MEACHAM: Yes, is Cordova on line still?

MR. THOMAS: Yeah, we're still on line.

DR. SPIES: Gary, we've got someone here that's very interested in oil spill technology, maybe you can tell them a little bit about OSRI.

MR. THOMAS: Sure, I'll give him a brief.....

UNIDENTIFIED VOICE: Gary.....

MR. THOMAS: The oil spill recovering team came out of the OPA90 legislation and in 1996, after considerable amount of work, we got some -- Senator Stevens set aside the funding as -- to conduct a program of research and development for oil spill response and prevention. And the program right now has got three components, it has a technology component,

the ecology component and the education component. And it tries to allocate its funding of projects on a 40-40-20 basis relative to those three disciplines. And we have a very detailed website on the -- that anybody can go to and you can find out -- you can find all of our BAAs, information on our past research projects, our annual plans and business plans and much of the philosophy behind the Oil Spill Recovery Institute. And that's the place to go, the website www.pwssp.gen.ha.us/osri/osrihtml.

CHAIRMAN MEACHAM: Okay. I think.....

MR. THOMAS: And that's governed by a separate board that has representatives from several State, several Federal agencies and it has commercial fishermen, Alaska Natives and oil industry representatives, in addition to a couple of representatives from the Science Center and the University of Alaska.

CHAIRMAN MEACHAM: Okay. Thank you very much, Gary, we're going to get back to the proposals here again, now. Thank you very much for the input.

MR. THOMAS: All right, thank you.

CHAIRMAN MEACHAM: Other questions for Grant Baker?

(No audible responses)

CHAIRMAN MEACHAM: I have one. You mentioned the university and other local groups or something, did you

have any others in mind, other than the university, that should be involved in the process, the GEM planning process?

MR. BAKER: I think that, you know, the GEM Work Group, I think that by adding the university it gives it something that's missing that's needed. It's not like -- I'm not saying start all over.

CHAIRMAN MEACHAM: I understand that, I thought you were suggesting.....

MR. BAKER: Oh, other groups?

CHAIRMAN MEACHAM: .....there was some others in addition to, it wasn't just the university.

MR. BAKER: No, no, just the university. I was saying maybe develop a subgroup because they share a third team with a strong emphasis for an endowment with the university, plus the university, the land, the facilities and the scientific connection with most of these groups with the university, why not have the university there as a subgroup with three or four people on it, specializing in the fisheries and maybe even a financial person.

CHAIRMAN MEACHAM: I understand. Thank you.

MR. BAKER: Thank you.

CHAIRMAN MEACHAM: All right. We move on then to John French. Welcome to the Public Advisory Group table again.

MR. FRENCH: Well, you're welcome [sic]. I'll

try to keep my comments at least marginally brief. I'm John French, formally of the University of Alaska and the Public Advisory Group. I now work as a consultant for Pegasus Enterprises out of Seward. Like Grant, I will make most of my comments about the Long-Term Monitoring Project, which, I guess, we're now calling the GEM Project, and I apologize to Molly if I cover some things she clarified during her presentation earlier, I missed most of it.

But, like Grant, I believe that the coordinating committee should probably be broadened to include the University of Alaska. I think it might be wise to have some good financial person, not necessarily the University of Alaska person, but one of the major foundations in the state also on that steering committee. Unlike Grant, I am very dubious as to whether a single university representative would give you anything more than a myopic bureaucrat that's very stuck in their ways with respect to research approaches. I think what is very critical in developing the GEM Project is trying to broaden the base of input that's coming into it. So, as I understand it, Molly is currently working on a fairly extensive draft, and I think after that's done would be a good time to distribute it throughout the scientific community and get feedback from the entirety of the scientific community. Because, as I was mentioning to Bob earlier, the University of Alaska itself is very vulcanized in terms of how it thinks

thing should be done, you're not going to get a single representative or even three representatives that represent the entirety of the research thought within the university. You got some very different factions that, in some cases, hardly talk to one another, which is one reason I retired, because the university does not function as I believe the university should function.

That doesn't mean it shouldn't be represented. What is does mean is you need to reach out. And I think it's true, to a lesser extent, with some of the other State and Federal agencies, you need to reach out to the base level scientists that are doing some of the work and get some of the innovated ideas. You'll get a lot of duplication, you'll get a lot of ideas that aren't practical, you'll get some things that are just totally a waste of time, but I don't know how else to get the input into the process without soliciting input from the whole base.

I know, back years ago, when were first doing some of the -- developing some of these large scale projects where there was a lot of very positive integration of personnel and ideas there was a workshop that was out here that was pretty -- it was structured but fairly free-wheeling and I personally attended that and felt that there was some very good input and ideas that floated around from that and some of those evolved. I could see it kind of evolved at that point, but some of those

ideas and collaborations evolved into the projects that have made the core of the Work Plan today. And I think that's been very positive. And I think that kind of scientific input, even though it's not the most efficient, would only occur with solicitations throughout the scientific community.

I think it's also important, probably some time a little later in the process, to get full public input, but that's generally the bid part of the process and I don't think I need to say that that needs to be done, I'm confident it will be done.

With respect to the plan, as outlined in the agenda packet, it kind of confirms my concerns that input is being received from a limited cross section of the scientific community. It uses an approach to long-term monitoring which is the traditional oceanographic model of starting with physics and building up from there, if you have infinite time and infinite dollars, unlimited time and dollars, that's a good way to do it, you can build up a picture and it can be very complete and you can answer all the questions of the world. However, when I say unlimited dollars, I mean far more dollars than we're even considering even talking about. We're talking many billions of dollars.

So what you need to do is more nearly what the approach that Gary Thomas alluded to, but from a somewhat different prospective. You need to integrate population level studies

with individual level studies and now have the facilities to do a lot of these individual studies which we didn't at the time the oil spill took place. We have a beautiful $50,000,000 facility that was built down in Seward exclusively with public fund, the SeaLife Center. We have some very good facilities over in Kodiak which were a little bit less in terms of public funds, both of those facilities have a significant amount of EVOS Restoration money in them and, to a lesser extent, Criminal Settlement money in them. And by using an integrated approach of some population studies, but then proofing it and extending the hypotheses as they're being developed with the individual organismal level studies, you can get a lot more information for your buck. And you can also tend to start to answer those questions that have the greatest impact on the human population, those species which we, as people, are the end users of in the area being studied.

Most of us don't know that we're seriously impacted by trends that take place in phytoplankton, most of use don't even bother to -- ignore the fact that we can't see them, we don't even think about them. So what we've got is a need to, I think, to take a little bit more innovative approach in the planning, and I realize it's early on in the process. But I think that'll be best achieved by an extensive solicitation of input into the process.

I don't want to drag on too much longer, so I would

like to touch a couple of other points. One with respect to community input and community-based project, which I know is a matter of discussion right before the PAG meeting adjourned to the public hearing. I think that community-based projects are important, although as Molly correctly pointed out, you are constrained by the consent degree, and I hate to disagree with Grant, but it's pretty explicit in how mitigation processes are excluded by the consent degree. I think the best way is to increase the community involvement, though, is an approach similar to what was used with TEK, and I that's been fairly successful.

The scientific community, especially the basic scientific community that was trained to try to look at the world and not answer specific questions, tends to be pretty stodgy, at one point I was one of them, and doesn't tend to really like people looking over their shoulder and answering the questions. So I think they need to be gently persuaded. TEK did a little of that. I think you could do a little bit more of it by some innovative approaches, such as, say, for every 10 or $15,000 of personnel cost in a project require that an research intern be hired from the affected communities in the area of the project. That intern could be as low as, say, a high school graduate. Obviously they need to have a little bit of education, but if you emphasize the desire as opposed to the formal education is the important factor, I think it could

be made to work. And if the PI has invested project time and money in that person, they're going to have a vested interested in training that person and helping that person understand the project, then that person becomes an ambassador back to their community. And I personally think that could be a fairly effective approach. And, yes, it decreases the efficiency and the professionalism of the team a little bit, but I think the positive spin offs could be very great.

Lastly, I'd like to very briefly address Dan's question about endowed chairs. One of the problems that the university has regularly brought up about endowed chairs is the fact that with principle of scientific freedom you're not supposed to tell somebody -- they're not supposed to change their research track, to change the direction they're going.

CHAIRMAN MEACHAM: Could you say that again?

MR. FRENCH: Okay. Normally, if you hire somebody into an endowed chair, at least with a lot of the foundation endowed-type -- endowed chairs that aren't specific in discipline, somebody comes into them, they're hired because of their intellectual prowess, rather than their expertise in a certain area and they may be able to -- and they may say -- be looking -- well, like a friend of mine was looking at carbohydrates for years and years, he was a world-renowned carbohydrate biochemist. He suddenly decided to go into looking at mechanisms of genetic expression, very different

area. Important area still, he's now world-renowned in that, too. It happens, but in terms of what the endowment might have been trying to achieve that wouldn't have worked.

There is, however, a mechanism within the university system that allows discipline-based, in other words, project oriented funding for specific chairs. And that's the mechanism that's used within the Marine Advisory Program, the extension arm of the university, where you specifically have funded missions as opposed to funded individuals. And so you could fund a mission, say, in seabirds and have -- one time it might have 100 percent of one person, but if that person went off and started doing something else irrelevant to the seabirds, you could bring other people on to that endowed posit -- that endowed mission, if you want to use the Federal term, in the grant system. And that would allow you a way of keeping consistent with the directions of the funding and the consent degree and also be consistent with standard operating procedure with, at least, part of the university.

CHAIRMAN MEACHAM: Thank you. Now, your comments just were in general related to GEM, you didn't have specific proposal you were going to address in the 2000 Plan; is that correct?

MR. FRENCH: No, it's specifically related in how I hope to see GEM develop.

CHAIRMAN MEACHAM: Yeah, that's.....

MR. FRENCH: I view the project in the pamphlet as being, more or less, a place (indiscernible - lowers voice).....

CHAIRMAN MEACHAM: Okay, that's fine.

MR. FRENCH: I think it needs to go forward, but I viewed what specifically what was in the booklet a placement.

CHAIRMAN MEACHAM: Any questions?

(No audible responses)

MR. THOMAS: Can we have a question from Cordova?

CHAIRMAN MEACHAM: Why don't you hold off just a second.

Any other questions from the group here?

(No audible responses)

CHAIRMAN MEACHAM: Are there any other individuals to provide testimony?

(No audible responses)

CHAIRMAN MEACHAM: Yeah, Gary, we'll give you just a minute.

MR. THOMAS: Yeah, in regard to the GEM Program, the Science Center has been very supportive of developing unified research and monitoring plans since its inception in 1989, and the track record that we have is that we were instrumental in the planning phase and development of the

SEA Program and the same way with the Oil Spill Recovery Institute Research and Development Program. And we would welcome any opportunity to get involved in this plan. We just completed a very successful SEA Research Program that captures those ideals that John has been so often discussing. And, really, we're available and kind of a little bit surprised that we're not part of that process, but if the uptake comes forward, we'll definitely be there.

MS. McCAMMON: Mr. Chairman, can I just take one minute, and I don't want to belabor this. And I covered this at my presentation earlier this afternoon, but you know, look at this, what people were looking at, at the GEM Working Group and tear it up because group doesn't exist, it was a very informal ad hoc group to help us put a draft on paper and to start the discussion on the whole concept.

(End of tape)

**(END OF PROCEEDINGS)**

# C E R T I F I C A T E

UNITED STATES OF AMERICA )
) ss.
STATE OF ALASKA )

I, Joseph P. Kolasinski, Notary Public in and for the State of Alaska and Owner of Computer Matrix do hereby certify:

THAT the foregoing pages numbered 3 through 31 contain a full, true and correct transcript of the Public Meeting of the Public Advisory Group on the Draft FY2000 Work Plan recorded electronically by Rebecca Williams on the 15th day of July 1999, commencing at the hour of 7:00 p.m. and thereafter transcribed by me to the best of my knowledge and ability.

THAT the Transcript has been prepared at the request of:

EXXON VALDEZ TRUSTEE COUNCIL, 645 G Street, Anchorage, Alaska 99501;

DATED at Anchorage, Alaska this 20th day of September 1999.

SIGNED AND CERTIFIED TO BY:

Joseph P. Kolasinski
Notary Public in and for Alaska
My Commission Expires: 04/17/00