18.1.7

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

MARCH 21, and 23, 1994

DRAFT

18.01.07

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING
MARCH 21, 1994
9:45 A.M.

ATTENDEES

Jim Ayers
Molly McCammon
Dave Gibbons
Eric Myers
Bob Spies
Pete Peterson
George Rose
Andy Gunther
Phil Mundy
Byron Morris
Alex Wertheimer
Jeep Rice
Sandy Rabinowitch
Jerome Montague
Mark Brodersen
Kim Sundberg
Bob Loeffler
L.J. Evans
Tony DeGange
Bill Hines
Veronica Gilbert
Kathy Frost
Jeff Short
Marilyn Dahlheim
Tracy Collier
Leslie Holland-Bartels
David Irons
Torie Baker
Dan Hull
John French
Gail Evanoff
David Duffy
Donald Schell
Bruce Wright
Joe Sullivan
Ray Thompson
Mark Willette

Meeting Ground Rules

-Put skepticism aside for today
-Express willingness to participate
-Have an open mind
-Nothing here is irrevocable
-Listen/respect others

DISCUSSION ITEMS/HANDOUTS

Restoration Plan Implementation
Meeting Notes - January 13, & 14, 1994 Work Session
Organization Structure "Straw Dog"
Agenda
Timeline FY 95 Work Plan Process
Status Report: 1992 Exxon Valdez Oil Spill Restoration Projects
Status Report: 1993 Exxon Valdez Oil Spill Restoration Projects
FY 94 Work Plan Projects

INTRODUCTION

Jim - we need to put together a base of understanding. He asked if there were items to add to the agenda. The 1994 Work Plan is in the process of implementation. There are three issues outstanding: 1) those projects which need EA, 2) the requirement of the TC that DPD and recommendations regarding 94320 be brought back before the TC, and 3) the resolution on habitat protection items which needed to be done before proceeding into appraisals. The first two have to go back before the TC. The meeting on the 31st will be reconvened in April depending on how quickly the DPD's and EA's can be completed. We are trying to push these forward to get the money appropriated and distributed. On habitat protection and acquisition, we have recently completed a final draft of uniform standards for appraisals (UASFLA). There is some debate among the willing sellers about the standards. We have reached agreement among the agencies and Trustees.

The 5th Anniversary Program is tomorrow. The program will be available for distribution by lunch today. This will become an annual event including a publication and a financial summary.

We tried to put together a one-page look at what we think the TC has generally said the direction is. We are still engaged in general restoration. The focus on habitat protection will be concluded by 1999. There is a commitment to establish a restoration reserve.

John - do the bars in this handout have any significance?

Jim - there is no symbolism in the thickness of the bars.

Jim - the draft Restoration Plan must be circulated as a part of the EIS to have an official public circulation and review. Within the plan, we are putting together the implementation structure which will become Appendix D. We are also trying to put together the 1995 Work Plan, and it should be consistent with what is going on. A survey was sent out about what kind of priorities should be affixed to monitoring.

Eric - there will be additional copies of the survey distributed. At this point, we have only received about one-third of what he hoped.

Jim - we don't want to say we can't get there this year so wait until 1996. We are trying to put the work plan together in a manner that is consistent with our basic principles and strategies based on goals and objectives. We will have a process including a science review board to look at what we have gathered and make recommendations about gaps and where we should proceed. We are kind of building the ship as we are sailing which causes some problems. It is worse to say don't head out until we have something built.

Torie - what is the EIS schedule?

Jim - it is in your packet on the timeline. It will be covered by Bob today.

Integrated research and information management is a significant part of this, and he doesn't want us not to think about it. It is his opinion that one of our primary responsibilities is that our research be integrated to the maximum extent possible. Andy has prepared a memo about what integrated research means. Information management and integrated research aspects have got to be made available to the public from basic to detailed. No environmental effort like this one is going to be successful if the public gets left behind on environmental issues. I talked to several people about this. All of that is for naught if we do not have a system for public access and participation, including what research is being done on what species and where that information is. We keep leaving that aspect off. I will continue to push for this aspect to be integrated. Putting together the draft Restoration Plan, EIS, the draft work plan, and an integrated research system are all going on at the same time. Until the EIS is completed, there can't be an execution of a decision. All these things are delicately interwoven, including the money. We are trying to catch up with the Restoration Plan and the EIS so that everything is traveling together. We are headed into more interaction and less mono-presentations.

Bob - My purpose is to remind people what we did in the first session on January 13th and 14th to bring everyone up to speed. I will walk through the notes from that meeting. The notes were sent out for comments, and we made a number of changes. We tried to accommodate the changes. If anyone has questions about how their changes were accommodate, please see him. The mission statement is an assignment of the TC and staff of where we are going and what we intend to accomplish. It sets the general

direction. We defined three ecosystems--pelagic, nearshore and upland. There is a list of injured resources and services from the Restoration Plan which tells which ecosystems those resources exist in. Some exist in two or three. Goals are a slightly more detailed version of what we want to accomplish for each ecosystem. Objectives are what we mean by recovery. An example was given for cutthroat trouts. If you have a project, you will be able to say what objective it contributes to. If you want to do something, it has to be scientifically justifiable and understandable from the point of view of the public. You will be able to explain that it meets the mission statement. Attachment 2 is definitions. Strategies are an approach of categories you want to do. A strategy might be to find out why something is not recovering. Attachment 3 is a set of principles and policies that we want to keep in mind when designing projects and our restoration program. They are consistent with Chapter 2 of the Restoration Plan.

Jim - did you receive any additional comments regarding the guiding principles?

Bob - we received about 8 or 9.

Jim - what about the review of the issue of pelagic and nearshore as the goal areas? We had started with discussions about species. Did you get comments on that aspect?

Bob - they commented on which animals lived in which area.

Mark - this will come up in Alex's discussion about divisions of work.

John - I would like some discussion regarding the omission of benthic.

Veronica - will the plan reflect some of the changes that have been made regarding the list of injured resources and services?

Bob - I don't know if it will revise the plan or be reflected in the Appendix.

Ray - you could put an addendum sheet within the existing plan to reflect those changes.

David - My general point is that some of the damage assessment reports have demonstrated injuries which are not on this list.

Bob - in the appendix, we do have a more comprehensive list and that demonstrates all those things which had mortality. This list demonstrates those that had sublethal- or population-level injury.

David - this list is not inclusive.

Jerome - I think you are probably right for seaducks.

David - we don't have indications for recovery for some of these species.

Jim - Pete brought up this discussion last time for the goldeneye. That is one of the issues that ought to be brought up annually for work plans.

Spies - this list was not meant to exclude work on other species if it could be justified.

Jim - we were going to say something about that. Is item #4 of the guiding principles adequate?

Jerome - we selected harlequins as representative of seaducks; never with the idea that this was the only one injured.

David - goldeneye didn't specifically show injury.

Bob - do all those breed in the area?

David - some just winter there.

Pete - the test in that FWS study separates out temporal change that is unrelated to the spill from change that is related to the spill. They include species which we have not directed study on. We did have survey studies that provided baseline data to address change.

Spies - we want to make sure the guiding principles don't exclude a species.

Jim - I didn't want to leap to a conclusion of whether #4 is sufficient to allow you the window to bring in additional species. We want to continue to discuss in some detail the opportunity for focus and discussion of what is going on in the ecosystem with regard to birds to bring the information into the system. I wanted us to have a discussion to make sure the window is there to bring in additional species. We could craft something to modify that.

Alex - the guiding principles exist but does the mechanism exist to implement that. We need to bring this new information in to corroborate there is an oil impact.

Jim - #3, #4 and #5 allow that opportunity but the structure will have to be put together. We are getting close to the adaptive management structure and the charge of the respective disciplines.

Pete - all the points are correct. The concern we might have is that this list will be viewed by the public as <u>the</u> list of species and not to be deviated from. It classifies the species into two lists, those on it and those not on it. Being on the list will confer a status on these species to the public.

Jim - is it reasonable to say there is consensus to take the list and put some language on it that it will not be published without a clear statement?

Bob - you might as well make it accurate at this time.

Alex - under each component you could say other species may be identified by ongoing analysis.

Pete - all the species on this list have varying degrees of certainty of how confident we are.

John - we could consider those species that have probable injury to allow the public the information that some scientists feel it should be on the list. It provides the differentiation between the two lists.

Jim - this list will probably change annually.

Pete - we should start now.

Jim - we are talking about the principles involved. If you think there is additional language that allows the opportunity for other species to be added to the list, then we should focus on what we should do about guiding principles. The list will be dealt with when we get to Alex' presentation.

Sandy - MIG uses this list largely to drive evaluation of land for habitat protection.

Jim - we have asked them to do overlays with your maps with a variety of the birds. What you are saying is correct for species that have some unique habitat relationship. I hope MIG is staying in touch with the Chief Scientist for this reason. We need to make sure we check in with them and go through it. We need to deal with questions that may come up and what is the process and who will review it. The two issues are: 1) the process and 2) if reasonable scientific knowledge indicates injury, then we out to move forward with that and add it to the list.

David - you have the damage assessment studies. One easy way is to make a list from those studies. It will give you an initial list.

Tony - the Restoration Plan contains the short list and the list in the back should be reviewed as well.

Eric - intertidal ecosystem is a category which is vast. The idea of putting together a definitive list would be a difficult undertaking.

Jim - the problem is it appears this is what we are doing. We ought to provide some

language that accommodates what David is saying.

Alex - you could have some footnote for identifying the different levels of injury based on current analysis.

Jim - Alex will go through this presentation with the understanding we need to do something with the list.

Alex - I will provide discussion on the Organizational Science Planning and Management. I got involved from the workshop in Cordova. There was a need identified for some sort of planning structure for the entire ecosystem approach to restoration. There are three reasons for the need: 1) concern by the public about whether the scientists are doing the right thing, 2) concerns of the investigators if it is technically feasible, and 3) is it being carried out with appropriate coordination? One of the types of structures to accomplish these goals was the OPEN program of George Rose. The structure has gone through a few changes to accomplish the goals identified by this group and in the context of the guiding principles. We have work groups organized by classes of injured species. Whatever restoration work is done has to be linked by injury to the settlement. These work groups are oriented towards the classes of injured resources but this should not be the single species paradigm. The groups require an interdisciplinary prospective to bring in other scientists. Public participation is also required. The SEA plan put together a plan to take an ecosystem approach to lead to an understanding that achieves restoration. In essence, these working groups will define what is possible and what is practical. The work groups would have representation on an interdisciplinary team. The team would coordinate activities among work groups and coordinate information to a science review board. The Science Review Board (SRB) will look at things on their technical merit. The Executive Director will decide in collaboration with the agencies and the public what is the range. The TC will make the final policies and decisions. The strawdog on the organizational structure talks about the composition. There is a startup and an operational phase to this. We are at the stage of developing initial strategies. We need to get those strategies so that when the solicitation for proposals goes out, there is some guidance for accomplishing the restoration goals. In the past, the call for proposals has been very broad and has lacked this concept of the definitions of strategies, objectives, and goals. It is important to conduct workshops so that people are aware of what is being undertaken. We can continue to coordinate the restoration efforts. Some sort of structure like this will provide an opportunity to do some of the things we have talked about today. You want people on the work groups with information on the resources in question. The SRB provides the mechanism to get the independent technical review that is necessary to carry out the research programs. The interdisciplinary team makes sure the coordination occurs among the work groups and works with the Executive Director to guarantee the annual work cycle is carried out.

Pete - the process could have worked alternatively with each of the three ecosystems. What was the logic for choosing this way?

Alex - Two reasons: 1) the settlement and 2) we still have partitioning by agencies into these groups. There has to be some way of working from these species levels. We kicked this around a lot on whether we could organize it by the three ecosystems. Because of research disciplines, we have to work from the resources.

Mark - you will end up with your bird and mammal people on all three of the ecosystem groups. You have to start out with the resources and build like the SEA plan did.

Kathy - some of the problems will vary by group.

Alex - you have a need to split back down into some species concerns and then build into an integrated approach.

Torie - given the fact that when we look at the larger timeline with three major components, is there any logic to include a habitat protection work group?

Mark - habitat protection is a tool for restoring some of these injured resources and services. It needs to be brought in at an appropriate point.

John - I was very happy to see there would be public involvement in these teams. Public input is a mandatory part of the settlement. There is a dotted line. This diagram underscores public input. On the PAG, we have expressed concern about the inability to address the annual work plan until it is in the semi-final form. The PAG could be a useful tool.

Alex - the work groups will come up with the strategies and concepts for achieving restoration. You have public input in terms of describing what is possible and what should be recommended.

Bob - these work groups are fluid and ad hoc enough so that you could do a subcommittee of those people.

Alex - there will be a lot of ground to cover in any work group.

John - I was at a subsistence meeting in Port Lions. They had a lot of observations that could prove useful to the work groups. None of them have ever gone to the public meetings because they didn't realize the link. If we could work this in, we could strengthen the process.

The TC doesn't want to release information to the PAG until it is released to the entire public.

Eric - in terms of including the PAG, the PAG membership was provided a copy of the survey to get input on the priority strategies.

John - I should relay that the PAG has asked to be involved in work plan development prior to distribution of the work plan document. You could add this to the diagram as an arrow off to the side. The TC might be willing to consider it.

Jerome - I don't think the TC ever had any policies forbidding that.

Alex - the question is whether there should be specific PAG involvement in development of the work plan.

Jim - generally PAGs are political entities. If the public is not involved in some very specific aspects like in the planning, it won't make any difference where you stick the PAG. I don't have any problem with what John is saying. The PAG ought to be reflective in planning and other aspects. The public needs to be involved in projects. People from communities involved in subsistence use, need some representatives on those work groups.

John - if you push that to extremes, you might no longer have PAG groups. Most of those on the PAG will not continue to serve if they don't have a defined role. You are on the verge of losing the PAG now because they don't feel they have a role.

Jim - I think we agree. They need to be involved in all aspects.

John - you need public input after you get the ideas put together and before you draft the final work plan.

Alex - there should be other ways to route public input before the final review.

Mark - the public and the PAG clearly have a role in the actions.

John - by making the lines solid, it would help to answer that.

Mark - the actual lines of authority are shown by solid lines or dashes. The lines here denote who works for whom.

Andy - when it comes to the actual preparing of DPD's and interim reports, how much do you see the work groups involved in the actual doing of what is at the bottom?

Alex - PI's should be members of these work groups. The obvious place where everyone can participate is in the annual workshop context. The amount of energy and availability of people needs to be worked out. PI's will be responsible for producing the final reports so they can be judged on performance. That information can be incorporated by the work groups into reviewing and revising strategies. He doesn't see the work groups actually submitting proposals. You still need to define what is the range of possible activities.

Andy - you would have conflict of interest problems. We have had some already. Given the small constellation of people in these groups, you have to think about this.

Alex - it is important to get the public input. How you get it is going to be difficult because usually these are not the people that show up. We need to ensure that this type of input is received. The work groups need to look at what should be done to affect restoration. Public input will be critical that what is being done is the highest priority need.

The interdisciplinary team serves a coordination function. Ideally, how this is going to work is somewhat daunting. They can use the results to revise strategies and the injury list. This team has to assume the responsibility to make sure this happens.

Jerome - the production of project descriptions and final reports isn't the responsibility of these teams. It goes back to the work force.

Kathy - it is a perceptual problem. The TC has to be willing to defend the intellectual integrity of the people it chooses for advice. There is a responsibility of this group to defend their experts. Public opinion happens because you let it happen.

Alex - you wouldn't have the same people on the SRB and Interdisciplinary Team.

Mark - there are several layers that projects have to get through before they are accepted.

Andy - I am concerned about legal opinion more so than public opinion. He agrees with Kathy.

Jeff - Andy's points need to get sorted out because they are very critical. How the groups function should emphasize what the agenda is from a scientific point of view. The process needs to be substantially brought along before looking at specific projects and asking people to come up with proposals so there is a temporal division and no one has a conflict of interest yet. You need to have that format to allow the people doing the work to do it.

Spies - what does the proposal submission process look like?

Alex - once project ideas are constructed, you have to allow some recognition that there are agency responsibilities. If you go out for an RFP, you exclude the agencies. You need to identify agency prerogatives. There will be areas where you can go to the RFP process and encourage proposals.

Mark - we had a lot of problems with procurement. We have come up with four things we want to try in 1995. There is the method that the project goes to the agency. Another method is identifying RFPs on specific projects, which excludes agencies because of

procurement code restrictions. Two other methods are the RFQ process where you come up with a little more general objective and ask for some technology for fixing this. You would then develop an RFP. The federal government at that point cannot bid on it. You will have to make a decision whether it will be an agency project or general project.

Sandy - different federal agencies have different policies and regulations. With DOI, nobody wants to compete but there is not an absolute prohibition. The point is from a practical standpoint, it is very difficult.

Mark - there is another one on an experimental basis to use NSF models.

Spies - can a federal agency put in an unsolicited proposal where the objectives have not been specified in concrete?

Bob - we have explored a variety of ways. If a private firm puts in a proposal, the only way to get them money is if the proposal was put in under an original procurement process such as RFP or RFQ.

Mark - if you go through the procurement process, the federal agencies will be excluded.

John - you cannot compete when the general solicitation goes out. He is talking about the ability to maintain research areas.

Mark - you have to identify in advance the project.

Torie - can you have the agencies be subcontractors?

Kathy - the state does it all the time.

Andy - public-supported institutions are very cautious about competing because government institutions are subsidized by the public. There is the idea there is an inordinate advantage.

Mark - it is not difficult to line out what goes to the agencies and experiment with these other two methods. All the monies have to be spent through the agencies.

Byron - with federal agencies, it is very tough to sole source.

Mark - we should try this other method as a way of opening up the process.

Pete - where is the decision made on what sorts of things go out and where is the public participation?

Bob - at minimum, we are looking at what would be done by the agency in the 1995 Work Plan. The project would state what portion will be done by the agency or by RFP.

Mark - this is to be developed.

Bob - there would be public participation through the ongoing process.

John - if you don't go out for open solicitation, you will get just as much criticism.

Mark - part of the opening of the process is to make sure there is an equitable division.

Kathy - we are perhaps overboard one way now but she cautions us not to go the other way. You have to get a middle ground.

Marilyn - the bottom line is the integrity of the research. Your best product is quality work. If the state or federal agency doesn't have the expertise to do it, they should go out for an RFP.

Jim - I think John has a point. As long as you keep the public on the outside of the tent, there is no reason for the public to believe. The public needs to be on the inside. In the working group in the discussion of mammals, there has to be members of the public involved, and they've got to say what are the options of doing this research. We are all agreeing that we have to have the public more involved and a more open discussion of who will decide what research will be done and who will do it.

John - you may have people to put forward a lot of hypotheses which needed testing, and they ended up being excluded.

Kathy - there is a lot of bureaucracy involved. We miss the boat when the public doesn't see the collaborative groups doing the studies.

Dave - a lot of the DA was based on litigation.

Mark - the intent is to get away from what was done in the past.

Jim - an issue he talked about with the TC is that the public was not involved. They are committed to having them involved. We decided to determine what the game was going to be and how you get to play. This is an effort to do this. We need some structure that says the public and in-state scientists are focusing on what is going on with the ecosystem in the spill area. We are trying to identify areas where we need to expand. A project ought not to go forward if members of the community are not involved because they have personal ownership. We have to come to a place where we can say we have the best sitting on our interdisciplinary team.

Alex - it seems if the work groups are oriented around an annual workshop cycle, that gives the opportunity for groups to meet with them.

Jim - some scientists and attorneys said CERCLA is not designed for science. It is designed to go to court and establish liability. CERCLA and NRDA are not designed to get to science or public participation. We are trying to change this.

Pete - you talk about opening it to the public. Shouldn't specific members of the public be invited to serve on the work groups when they meet? PAG members may be one first cut at the public on the working group level. Gail would be a superb member of the ecosystem working group.

Alex - you could make the PI's attend. An open meeting in Anchorage doesn't necessarily accomplish the goals.

Kathy - you may have to pay travel to get the input you want.

There is that perception that we are running a political campaign to get support for proposals. We are not voting on what the most popular project is.

Pete - isn't that kind of the way it has been. The PAG has come in late in the past. They ought to be at the grass roots level.

Alex - I would like to get a feel for whether this organizational approach is correct. Are we okay?

Pete - the ID team should be called an ecosystem team.

Alex - the projects are how we get there.

David - there needs to be some sort of traffic-cop questions. Someone needs to ask across the board. You might want to strengthen the team with some people committed to that level.

Kathy - the first impression ought to be to get at the connections. The problem all along has been the boxes.

Jim - we should finish the general discussion with the understanding that we will get to work groups after this next section. What we are trying to do is to get to work groups and talk about how their groups would function. We can go away to lunch and think about this.

Donald - if this is going to be an ecosystem study, the structure is wrong. You have to have input from the lower trophic levels and the environmental groups.

Mark - this is an ecosystem approach to restore the injured resources.

Jim - there was a discussion about this on the 13th and 14th and Donald should talk with Alex and Jeep about the history of how we got to here. They were taken off as a separate box but may need to be added.

Spies - I liked the analogy of looking at these in terms of competition variation.

Alex - if you were going to come in with the concept of doing ecosystem research, you would have to come in and determine trophic phases.

Jim - Donald also said what about some other aspects.

Donald - you have to acknowledge that other physical conditions exist.

Alex - the guiding principles address this.

Jim - you have to note that one of the groups has this responsibility.

Alex - you could call the ID team an ecosystem team.

John - there are some major shifts in the northwest gulf of Alaska. Without knowing what kind of principles are driving these changes, it will be very difficult to determine smaller perturbations being driven by the oil spill. There are some glaring weaknesses in the basic fundamental dynamics that are running the system. We probably know more about the high end predators than any other level in between.

Jim - this is a substantive issue that shouldn't be left alone. We need to resolve that issue among the scientists and say those issues are going to be addressed with this chart or we need to add a few more boxes.

Kathy - we need to put the time into it. She is afraid of these little boxes. We don't have the forcing mechanism in our group to force us to think.

Marilyn - I had to go outside my lab to get expertise. What drove it was the species. For us to grow in respective groups, we need input from other groups.

Alex - if you isolate primary producers, what are they going to talk about and how will they relate to their resources?

Donald - I have seen this done effectively in past groups. The secret is good PIs, users, and public meetings. In the morning, you could have disciplinary groups put their group together. Then in the afternoon you divide those up. You need a good coordinator to tie people together from these groups. In subgroups, you can get pretty specialized.

Jim - you can't put everyone in there and not give anyone a name. Maybe we need to draw it differently.

Alex - the annual workshop would work that way. We had different elements. A large group was split into smaller groups, and it was very informative and interactive.

Jim - we will discuss this at lunch and come back and discuss the physical conditions question.

Lunch 12:40-1:45.

Alex - interdisciplinary team was replaced by ecosystem team. The alternate would be a trophic-level concept as a way to organize the groups. After talking to people, I still feel that because there is the need to link efforts to resources, that is where we should start out.

Each of the work groups will be called interdisciplinary work groups.

John - the interdisciplinary team should be placed in a separate box.

Alex - it use to be in a box but was removed because it was feared that this box would be misconstrued as a decision-making box.

Mark - you might look at it as these boxes are used to make the link as the settlement requires. Ad hoc groups are formed to deal with specific problems from the work groups and kind of dissolve.
Alex - SEA is a good example with the oceanography component.

Joe - in the NRDA studies, we had technical services. Would you create another box for dealing with that?

Alex - that didn't always work.

Byron - it can't exist on its own.

Alex - it would be better if it were integrated in the projects and formulated in the interdisciplinary efforts.

Pete - this group should think about the kinds of other ecosystem studies like SEA that might be appropriate to answer broad questions. There are questions about lack of return of pink salmon to the streams. There are continuing questions about rearing lakes for salmon and their ecosystem status. There are questions about the contaminated mussel beds. There may be others that may be stimulated in a community of scientists. Maybe we should think more synthetically as a group.

An effective tool is to set up workshops, like the SEA workshop, to focus on those sort of questions. The TC representatives should be a little more proactive.

Mark - with the SRB, we will try to be more proactive.

Dan - can you describe the mechanism by which the public participates?

Alex - I thought this group would formulate how this would occur. There is the need for the holistic view and the need to partition out to accomplish things.

Pete - philosophically, that is one of the successes that we can point to. Instead of agencies working alone, this forced people to come together for a greater level of cooperation.

Mark - we may be in a situation that after working with this for a few years, people will be comfortable with going to a different structure. If we can get a broader circle of people comfortable, we may be able to change the structure.

Byron - in reading the guiding principles regarding the structure, you need to keep the resources in boxes. We still have to tackle #10. The structure captures what the guiding principles set out to do.

Pete - we should put a timeline on when these various groups of people work.

Alex - the development of initial strategy should go out as guidance.

Mark - they are soliciting ideas to make into proposals for the draft work plan. If we go with the RFQ process where you can figure out a specific strategy, you would start that process on May 15th. The RFP would not go out until November after TC authorization. A brief project description will need to be written by May 15th.

Spies - what about when is ownership of an idea lost?

Mark - we spent a good deal of time going over this with the procurement experts.

Bill - how does this interface with your total process? Isn't this business as usual.

Alex - I would like to see the work groups take a stab at developing the strategies as guidance. There still needs to be some way to bring in new ideas and concepts into the process.

Pete - that could be done at the level of these work groups.

Alex - are we satisfied that we can identify the interdisciplinary nature of these work

groups and express their commitment to an ecosystem approach or do we need an alternative organization?

Jerome - I would like more discussion of the three-box approach.

Alex - we identified three alternate organizations by trophic dynamics. Do you want to further the discussion of trophic-level organization?

Donald - I am in complete agreement that you can't do everything. Instead of a box may be it should be some sort of triangular linkage.

Alex - would you want to organize work groups at that level? There is a need to organize as a whole and segregate into groups to get things done.

Donald - fairly early in the game, you will identify what was or was not impacted. You need both types of work groups that are solidifying and integrating with each other. Each group could also be charged with something to accomplish.

Jerome - without having that kind of organization, this kind of ecosystem approach is just window dressing. The ecosystem approach is composed of at least the components he is talking about. We are sort of missing the boat here.

George - I would take a different view. It is easier to get people to cross species than to go up and down the ladder from physics to geography. There is always going to be a problem at this level but what you have here is going to be less problematic than anything else. On this ecosystem approach, there are many ways to look at that. What you have now is one way to do it, and it is certainly valid. To say you could study a whole ecosystem is rubbish.

Kathy - this is a focal approach.

Spies - the problem with the boxes and the lines is the boxes have definitive purposes and nobody knows what the lines mean.

Tracy - people see this as a multi-disciplinary team.

Phil - this is the same sort of challenge you face when putting together a relational database. I would agree that you need to understand the process that links the boxes and the relationship. You can redraw this infinitely but you need to make sure you have relation.

Pete - I can accept this. I don't like the physics as a group. The MIG is functional now and obviously doesn't fit specifically in any one of these. I could envision a couple of other ecosystem- type studies for which there might be a separate management oversight

group.

Alex - you will still have the need for coordinated research activity. You can't have SEA independently developing research.

John - I would hope we have a series of larger umbrella plans like the SEA plan that overreach more than one single species. Hopefully, the Restoration Plan will provide somewhat of an umbrella.

Leslie - I would have to agree with that. I would hate to see SEA as an entity unto itself but hopefully as a continuum of very successful projects.

Don - information will flow down; therefore, the triangle would work. You will need information all the way to the top. We need to settle on an acceptable picture. SEA cannot be independent.
Alex - This is not a two-dimensional organization.

Mark - one potential solution is to have a second page to go with this saying we recognize how ecosystems work, and we may have to address them a different way.

Dan - it sounds like the different work groups provide pathways for an ecosystem to work. You might have a number of different programs with a variety of projects within them.

Alex - those projects and programs need to be well aware of what each other is doing.

Dan - there are ways that different projects could interact on some levels.

Alex - you need to keep in mind that this isn't just to come up with an approach to ecosystem research projects but also to decide what monitoring is appropriate. These work groups have a very large task, and there may be a need to partition these tasks out. It is going to take people who are willing to work to make it work.
Do we feel sufficiently secure about covering some of these concerns so that we can talk about how these work groups operate?

Mark - do we feel the need for a second page to go with this?

David - one way to get organized is by hypothesis. You might do this later.

Jeep - This might be a reason to attend a different work group session if your project was part of the hypothesis.

Jeff - a lot of these issues hinge on hypotheses. The first order of business of the work groups is to ask if they have any hypotheses at all. If they do, what are they and what

are the priorities. Once that gets laid out on the table, you can think about whether the box should continue its existence and how it will integrate with the other boxes.

Alex - in a sense, it is if you build it, they will come.

John - I would like to caution against overemphasizing a single unproven hypothesis when there are other good alternatives that could be tested.

Jim - the structure is designed to allow bird people to talk about what are the things they are discovering. From that you expand your horizons in the interdisciplinary teams. The public can follow that logic. I am very concerned that we focus on what we know relating to the spill and pulling the groups together on an interdisciplinary basis. Hypothesis debates tend to exclude people.

Spies - it may be a matter of language and cultures. In the SEA program, it is dealing with why haven't two species of fish recovered. We are not that far apart but it's just a matter of how you use the language.

John - I am against putting individual hypotheses up there.

Jeff - I want us to know what the alternatives are and the people in the boxes to tell us what are the questions we need to study. I want to know what the hypotheses are.

The SEA people have got a hypothesis for population fluctuations. There is also an alternative hypothesis.

Mark - there are probably 13 hypotheses in the SEA plan.

Alex - there were something like 14 explicit hypotheses that could be split up even more into about 40 or 50.

Jim - that is the point of the interdisciplinary team. Simply because someone could establish a sound scientific hypothesis statement does not mean that a project should be funded. That is why we have a structure that allows for how a species is doing.

Alex - this structure will provide a conceptualization of what is possible and what is practical.

We need to keep in mind that we are working towards a healthy ecosystem. The guiding principles say that the projects that make the link are the most important. You have to choose between projects. The TC gets the final decision.

Can we now talk about what the work groups will specifically do?

Mark - it is not clear to him who would take the hypotheses generated by the different groups and integrate them.

Alex - we have the interdisciplinary groups that are focusing on specific groups of species. Then you have the ecosystem team made up of different representation.

Mark - why don't you put the ecosystem team in a different box.

Alex - NOAA considered the box as a choke point. You could talk about competing levels for proposals and who makes the calls.

George - that would be taken care of by the management committee and the program leader. In reality, that couldn't happen.

Alex - is that because you have assigned weights?

George - yes.

Alex - I don't think the TC would be willing to assign percentages of money to a box. They have consistently declined to do it.

Jim - the TC developed some ground rules, and there are some guiding principles of what expenditures are going to be. If you aren't able to substantiate what your proposal is and why it is, then they probably aren't going to fund it. The TC has already said there are going to be some disciplines.

Alex - it would be useful to groups working on those types of questions to have some bounds to narrow the discussion.

Jim - the interdisciplinary team will function because there is not enough money for everyone to run off and do their own thing. The ecosystem team would have to look at what are the most important research or monitoring projects that we ought to recommend.

Alex - you will get those types of recommendations from the working groups, and the ecosystem team will carry them forward.

Jim - you want the team to have some self discipline. There has got to be good solid grounds of why or why not something is recommended for funding. There has to be some discipline so that it is not simply an avenue for political rallying that whoever threatens the most and gets the most letters coming in, wins. This group of people also have to recommend based on priority. It won't come afterwards but must come beforehand.

Spies - to ensure this discipline takes place, let the results tell you which direction to go in. In the 2nd and 3rd year, you will get the feedback loop. One of the worst things we can do is to start from ground zero with no information.

Alex - these work groups will be putting in the highest priority things. The SRB is responsible for coordinating the more specific peer review. You need both levels of review--the guidance level and the specific level.

John - his concern is whether we are treating agency science different from nonagency science. Where is the scientific review?

Jerome - the TC delegates that to the Executive Director.

Jim - agencies have only been authorized to go forward with that which is necessary to put together the DPD. It is his view that projects that don't get their studies in, don't get money. If the DPD has not been peer reviewed, full implementation of that project will not go forward.

John - has a project been turned down based on the DPD?

Jim - to my knowledge, there have been two.

Mark - in terms of where peer review occurs in this circle, it is in many places.

Torie - the critical point is to be upfront. A good amount of effort is put in that level.

John - I am not sure there needs to be a whole lot of peer review. There needs to be some way to make sure it meets minimum criteria. We are concerned about front loading the review process.

Mark - there is a lot of room for doing what needs to be done.

Alex - does habitat protection need to be on this list?

Jeep - it is not on a comparable scale. That process doesn't fit into this process.

Spies - the rationale for habitat protection is a little bit more abstract than some of the other restoration tools.

Dave - why is general restoration up there? It includes fish ladders.

John - other than politics, why are we doing it?

David Duffy - is all land equal?

Spies - the MIG has a way of ranking.

Alex - will we want the work groups dealing with habitat issues?

Pete - Bob's point is that a lot of the feedback is in the long term. There are long-term questions that lie outside the scope of this process. I could envision developing research goals relative to these key resources. Some questions may be answerable in short, such as timber issues.

Torie - I would be inclined to include habitat protection in the flow of this.

Bob - in the sense of answering research question, it strikes me that it is incorporated in there. In terms of what land to buy and the question of whether you are going to negotiate for land here or there, are you saying that those questions should be incorporated?

Torie - habitat protection is injury related driven.

Dave - those are clearly political and at the Executive Director level. The MIG needs the recent information so that the recommendations are made wisely. The decisions are made somewhere above with complete information.

Spies - my negative comments came from a fear of generating new studies.

Byron - identification of strategies is very important and more research is needed.

George - the role of the science is to identify critical areas. A couple of examples from the OPEN project are they have described nursery areas and recommended that they be given considerations like closures. It is not science's job to buy land. You don't want to get involved in anything beyond the science.

Mark - the work groups are suppose to come up with information to feed into the habitat protection group. This process is not everything that is being done in restoration; same with habitat acquisition. Putting habitat protection in is valid and the actual mechanics should be left to the Executive Director.

Alex - we will take a break and return to the composition and responsibilities of the work group.

Break - 3:35.

Alex - we are going to have to constantly be reminded this should be a new paradigm. Molly has some real ideas on what the ecosystem team should be and how it can work effectively.

We will move on to agenda item #5.

Bob - I will go over the 1995 Work Plan in a simplified version to see how the structure we have discussed fits in. It has been five years since the spill. Last year we put out a solicitation that was fairly undirected. There is enough knowledge in this room to develop a directed solicitation. From May 15 - June 15, there will be solicitation of project proposals. From June through August we develop the draft work plan. From August 15 - October 1, there will be review of the work plan. On October 31, the TC will meet on the 1995 Work Plan. In terms of developing the draft work plan, whatever direction we can get from the IDT will be part of the direction for solicitation. One of the products that has to come out of this organizational structure is that by May 15, there is a work plan. If we can identify projects where we are not sure exactly what are the services we want, then it is appropriate to go out for competitive proposals. This is different in that it is a two-scope process.

Spies - is it further defined on the basis of response?

Kathy - there is the perception that they are giving you all their dynamite ideas and you are giving their ideas to the world.

Tony - when do you go out for an RFQ?

Bob - that is something a group would work out. It would be appropriate when you have an objective but didn't have the expertise.

Pete - most of the time you would do that if you needed a bigger part of a particular project.

Mark - if you want people to be innovative, there has to be some reward. I would limit this to five proposals while we experiment with this. Basically, it has to be ideas with agreement to go this route. What we are trying to do is broaden participation to more than just the agencies.

John - once the decision is made to go with an RFQ, you limit the agencies?

Mark - I think so.

Spies - is there some way to limit the second step. Someone could put the idea in, and someone else could use it. Isn't there a way where we only go through one round?

Bob - we have not been able to figure out a way.

Pete - the nice thing about that mechanism is you don't have to specify the question.

Mark - an RFP says give us a good idea within these perimeters. There are two different ways to get the private sector to innovate for us.

Pete - can you give two examples of problems on the RFQ?

Mark - the example might be we know there is a problem with harlequin duck, give us some ideas on why this problem is occurring. The people who have come up with the idea have a pretty good chance of getting it.

Spies - it is better at this point to avoid public ridicule. This idea of memorializing someone else's idea will invite this.

Kathy - private sector people have complained about this.

Mark - that is exactly what this is.

Andy - if you know the issue you want, you can put out a RFP that isn't so specific.

Alex - you have two things--the price tag and the technical merit.

Mark - you cannot start talking price half way into it.

Andy - couldn't you leave the price sealed?

Mark - we are trying to figure out innovative methods.

Jeep - if you are going blind into an RFP, price can't be a factor. It has to be based on value and merit.

Bob - the question of doing it in a two-stage process where one stage is public, doesn't seem to be getting enthusiasm.

Phil - if you are handing out money to agencies, is it not feasible to set up an entity like the National Research Council, which is private? Then people would not have to worry about their ideas.

Mark - our attorneys say we can't do this.

John - do you envision the response being as little as one or two pages?

Mark - you need enough technical to prove that what you are saying you can do, you can do.

Bob - should we get rid of this or put together a small group to flush this out more.

Joe - I would offer a number of consultants a free meal to help flush this out.

Pete - it is not just consultants.

Bob - is that the sense that it is worth flushing out?

Andy - the more information you draw in from these outsiders, the more value the process gets and the more important it is the process protects the proprietary nature of the projects.

Mark - for an RFP, it has to be all agency people. Once it has gotten in the agency hands from the council, it is up to the agency. The final decision to authorize the project comes from the TC.

Bob - On January 13th and 14th, Spies said we should try to use a competitive method. Prior to the work plan, this is the only way we have come up with. I hear that we should get a small committee to flush it out.

Byron - I would like to explore what can be done on the federal side.

Bob - May 15th is a product date. Development occurs during the summer and then in late summer and fall, it goes out for public review. There are two other processes which are occurring along similar time scales. The EIS goes out on June 15th for public review. Their final will be signed off on October 31st. The implementation management structure will be an appendix to the Restoration Plan. The Restoration Plan will go out with the EIS for review.

Pete - what needs to be available and finished by May 15th?

Bob - what we would like to have available are the goals and as many of the strategies flushed out as possible. One of the pieces we would like is a recovery monitoring schedule so that we can say we are going to look at pigeon guillemots.

Pete - is that going out as a piece of paper?

Bob - we are probably not trying to get everybody's attention. We want the opportunity available. It will probably not be a huge blanket.

Molly - we need the implementation management structure document to go out with the draft Restoration Plan as a package. The dates May 15, - June 1, are when we want the document to go out for review and give the public some idea of what the TC wants.

Eric - the survey was mailed out to the participants from the January meeting. It asks some questions related to what would be considered priorities for work efforts in FY 95,

specifically looking at recovery monitoring. There were some questions regarding research and general restoration priorities. All of this effort is intended to try to bring more focus to the 1995 Work Plan effort and to refine the thinking regarding where it should be focused to make the best use of efforts. At this point, we have not received enough survey responses to warrant an elaborate summary. We have received about 20 so far. There are a few points of commonality worth making note of. One of themes that came through very clearly that there is a broad need for synthesis. There were some specific recommendations relating to ecosystem toxicology, trophic interactions and the priority of the forage fish work going on. In general, it has validated the importance of the ecosystem approach. All of this effort is an attempt to try to come up with an adapted management or a feedback loop to make use of the knowledge we have accumulated at this point. The survey can be used by any of the people involved in this process. We could extend the deadline through the end of this week. I will make copies of the survey available to anyone who would benefit from it. This survey initially attempted to discuss a variety of subjects. There has to been a further evolution of the thinking for coming up with a set of monitoring strategies. That is one piece of the work plan effort that should be achievable through the expertise that is available from the TC agencies and the peer review scientists. Byron will talk about that.

Byron - when we talk about recovery monitoring, we are talking about returning to pre-spill conditions. It doesn't include the effectiveness of some measure of restoration. We have struggled because we have not completed addressing the problem of what we should be monitoring and how should we be monitoring. We felt we knew enough now of defining 1) the monitoring strategy and 2) how frequently this monitoring should be conducted. We started this on a parallel track with Eric's survey. The approach we took was that we went to each trustee agency liaison to distribute a form to the appropriate agency expert or PI for a particular resource. This is an incomplete example for sea otters. It is boiler plate to a point. The recovery status comes from the draft Restoration Plan. The form was sent out last Thursday to the liaisons. The intention is that the completed forms will be returned by the first of April. On the 7th of April we will review the forms. They will then go to Spies and the peer reviewers for critical review. We will have a final review of the draft product by this group. We have tentatively scheduled this for April 29th. When an acceptable product is arrived at we will add it as part of the implementation management structure as an appendix to the draft Restoration Plan. It will be used as a long-range planning tool.

Bill - this is a first cut and will be flushed out even more?

Byron - this is the first cut and we will compare agencies' opinions with our opinions and the peer reviewers.

Alex - this will be an appropriate responsibility for the work groups. They can know what is going on in order to develop the restoration and research strategies.

Byron - that is a good point and if they are up and going, they can review it.

Pete - I would agree with Alex that the working groups get a first crack at these.

Byron - these drafts will be available for the work group to consider.

Alex - the next step is to define the responsibilities and then we can develop the timeline.

Pete - what do we want to get done by the end of Wednesday?

Alex - by the end of Wednesday, we want to identify a core group that can move the concept further. The working groups will not be limited to those players.

Molly - is there any confusion about the general tracks we are moving forward on? It may be confusing to those who haven't been part of this process on a day-to-day basis. It has been made real clear that the TC is not comfortable with moving ahead with the work plan without more direction. The staff feels uncomfortable with going out to the public without more direction. We are trying to cram a lot in a short amount of time. Does the group understand what we are trying to accomplish?

Kathy - we are all concerned about the quality of science. The single thing impairing the science is not knowing whether you have money to go out. Every investigator has the same problem with lead time. A lot of dedicated people are doing tap dances on tight ropes. Any relief would help. You will find more interest in participating in the science. At the university level, they don't see it as a good mechanism when you don't get your money until two weeks.

Donald - they want some solid assurance that the work can be done.

Molly - we want do this but we have had to factor in public review.

Mark - you still should be able to have it by early November.

Kathy - the five-page summary that goes to the TC should go with the proposal.

Joe - we did that a couple of years ago. A whole bunch of projects didn't fly. It had a huge burnout factor on the PI's.

Kathy - we were getting due dates seven and ten days before they were due. People who want to think ahead will build deadlines into their system.

Marilyn - another problem is your agency starts shifting priorities.

Pete - you would think it would get better but last year was worse.

Mark - the TC realizes they may not have done the best thing. 1995 is another crunch but with any luck, we will see a big change in 1996.

Pete - this plan looks like 1995 will be better.

Mark - it will be better but we still won't be there.

Molly - what we want to accomplish is a strategic plan and restructuring the Restoration Plan into a different format, and we are also trying to improve the scientific review of this whole process. We want to develop this strategic plan and some kind of consensus of how this scientific review process should occur. We also need the initial start of these working groups. If we can accomplish all that by Wednesday, that will be a great achievement.

Alex - we need to decide what is achievable.

Molly - we have until the end of October to reach guidance on research and monitoring strategies. We should give the public as much guidance up front and not wait until October.

Byron - is the budget year an awful year for planning? There are ways you can budget and plan by a more appropriate calendar. For multi-year planning and funding, should we work up the budgets for them.

Molly - there is nothing that prohibits the TC from approving multi-year funding. It is the constraints of funding that are the problem.

Joe - part of the problem is that the Restoration Plan is in effect.

Molly - we should set up a process for continuing this on Wednesday. Bob suggested setting up a work group which could work on contracting ideas. Jim wanted to reiterate how important this process is. We will meet on Wednesday morning at 8:30.

Alex - we could brainstorm tomorrow morning if anyone is interested.

Bob - those interested in flushing out the procurement questions on Wednesday should see him.

Meeting adjourned at 5:30.

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING
MARCH 23, 1994
8:30 A.M.

ATTENDEES

Jim Ayers
Molly McCammon
Dave Gibbons
Eric Myers
Bob Spies
Pete Peterson
George Rose
Andy Gunther
Byron Morris
Alex Wertheimer
Jeep Rice
Sandy Rabinowitch
Jerome Montague
Mark Brodersen
Bob Loeffler
Veronica Gilbert
Kathy Frost
Jeff Short
Marilyn Dahlheim
Tracy Collier
Leslie Holland-Bartels
David Irons
Torie Baker
John French
David Duffy
Donald Schell
Bruce Wright
Joe Sullivan
Mark Willette
Jim Bodkin
Karen Lange
Jerome Selby
David Salmon
Sam Sharr
Ken Hill
Donna Fischer
Gail Irvine

Ted Cooney
Scott Hatch
Evelyn Brown
Doug Griffin
Gary Thomas

Molly - our primary goal is to improve and clarify and do a better job of integrating scientific research. We are trying to put together a different process for the 1995 Work Plan. The Draft Restoration Plan is under EIS review. Under the direction of the Executive Director, we are trying to develop a strategic approach to the Restoration Plan. We are trying to reorganize how the science planning and management are done so that more of the science gets integrated and goes through different kinds of review processes, synthesis, and integration to do some good science for the north Pacific. All these are parallel tracks, and we are trying to do a major amount of work by October. NOAA is taking the lead at putting up a strawdog organization structure. We are looking at developing a science plan for the remainder of the settlement and on into the future.

Alex - a revised version of the strawdog was circulated which reflects the discussions on management. We are trying to have science planning and management achieve the goals we developed. There were various ways to work from the holistic prospective to get down to where we could formulate research approaches. The danger is people interpret this as the single-species paradigm. The settlement is based on the injured resources and the services that depend on them. Management structure and disciplines are organized around this. The SEA planning group is an example of how you can do that which was based on the ecosystem approach. They brought together an interdisciplinary team. Some changes were made to the structure which reflect the concerns. We need to find a better label than ecosystem team which ensures that the groups are not isolated and continually cooperate to give effective projects and objectives for a healthy ecosystem.

Kathy - I suggest using coordination team.

Alex - when Pete came up with ecosystem team, we didn't have interdisciplinary labels on the work groups.

Torie - I suggest calling the team injured resources coordination team.

Pete - coordinating committee.

Byron - interdisciplinary coordinating committee.

Alex - we will have to explain this to people, and we want it to reflect what the functions of these people are.

Jerome - so the functions of the group would be primarily to funnel recommended projects to the Executive Director and the Science Review Board (SRB)?

Alex - I think that is where we are now. We must decide how much it coordinates and synthesizes. I would suggest we start from the base level and start talking about the responsibilities of these interdisciplinary work groups and then talk about how the coordinating committee functions.

We are at the stage of developing initial strategies to feed into this process. We also want to accomplish the boxes which are lacking at the base level among the scientists and the public. Then we want to have a mechanism to use information to review and revise what is going on so that we have as much opportunity to do the right thing. The work groups will come up with what is possible to do. With the public input, they will also come up with some conceptualization of what is important to do. There will be an objective SRB that has feedback in the development of the approaches and in directing the efforts of the peer reviewers and the scientists.

Spies - could we talk about the dynamics of how this process works? If this is going to be a bottom up type thing that goes to review or some dynamic from the ecosystem team, the public, Executive Director or SRB, there needs to be some expression of what needs to be done. This will avoid the shopping list process.

Alex - we have got to have that. The SRB has to be in on development of the approaches. The ecosystem team makes sure the information exchange and feedback loop goes on.

Jim - it is very clear none of us has scripts here. Everyone seems to agree we ought to be talking about ecosystems. It seems we want the groups to do a general description of how the ecosystems function within respect to their individual disciplinary team. We need to know what is the status and what are the gaps. We definitely want the groups to begin to think about what are some relevant hypotheses of the cause of the problem and that ought to be carried to a higher level for discussion. We also want the groups to work with the other interdisciplinary teams. He doesn't want us to simply reorganize the structure where we have the same process as before and just become a grant organization. These groups need to describe what is in the ecosystem so that we don't slip off into the other direction.

Pete - you want to be true to the policy that the public and scientists can suggest what are reasonable directions. There needs to be that opportunity. There has to be some balance between the top down and bottom up.

George - it is not clear where the scientific leadership will come from.

Alex - by the composition of these groups, the Chief Scientist will still play a major role

in keeping the science on track.

George - that assumes there is science to keep on track. What are the philosophical considerations about the kind of science you want to do and how do you want to approach it? It should come from a variety of sources. There is no committee that will fulfill that function and direct traffic.

Alex - in the OPEN program, that is the scientific management team? Is the proposed SRB analogous to that?

George - the advisory board would serve a reviewing function of things that had already gone through a filter. It is another step to go to an actual scientific review saying this has been done properly.

Alex - the SRB would be more proactive in giving feedback in the scientific approaches.

Jeep - I think this is baloney. You have a bottom-up program. In the last five years, the TC has not exerted a downward-type approach to feedback. You can't expect Spies and the SRB to do that. They don't have the responsibility or expertise. This is a missing component, and there is a choke point at the TC process.

Jim - what is your suggestion?

Jeep - it is much easier to complain about it.

The TC has the legal responsibility, and there has to be some leadership. They need the work to be done. The trouble is there needs to be some sort of agency science with heavy input into the work groups.

Alex - this diagram does not constrain what you are talking about. These are the boundaries for figuring out what is most important. The less direction, the more difficult.

Spies - the problem is at the ecosystem team level. That is where the strength needs to be. It doesn't provide a mechanism yet that interacts from the bottom up.

Bob - Jeep was saying the only reason you would cut out good projects for budgetary reasons is if you had political considerations. TC representatives have to set the kind of policies which say this level of stuff is too much.

Jim - the reason we are here is because of what the TC said to me. We want more involvement in where we are going. Their only choice before was yes or no. How we involve the variety of scientists in state and out of state is important. What would we do in terms of moving forward with a project in an ecosystem manner. That is what the TC has said over and over. There has got to be some scientific direction to it but you can't

exclude the people in this room.

Kathy - we are not going forward without total direction. Some focus has been introduced. It looks like before the teams meet independently, we need something like the work group in Cordova to agree that we are looking at the ecosystem approach and have everyone go to the meeting with their marching orders. They need to put together a list of what is important, and it won't be perfect. There was a little confusion about the purpose of the Cordova meeting but a lot was accomplished in a little time.

Andy - we have the guiding principles-- several of which relate to the kind of research and projects that are considered important. The integration of policy and science with the guiding principles could be turned into the charges given to these subgroups. The more boundaries we can put on what the targets are, the easier the ecosystem team's job will be.

George - someone at the ground level has to interpret it. I see the function of the group as more than just a synthesis body. They provide direction and leadership as well as a synthesis role.

Byron - I don't view this as a division of labor type structure but a kind of distillation process.

Alex - the working groups will be an open process.

In one sense, you are going into the administration and bureaucracy, and in another you want to achieve your restoration components. No matter how you do it, it is not going to be right. You should come together as an ecosystem component disciplinary team.

Gail - what is missing if you don't address how the ecosystems are functioning first is then you will expect people to develop structure. The SEA proposals had some grand scheme.

Spies - how important do you think some kind of driving paradigm is to this? Should there be multiple kinds of interpretations? There are certain advantages and disadvantages.

George - every scientist and every person should be able to see his or her project in the overall scheme. That is important in a psychological way. To have things like the Cordova workshop are helpful to get down to the brass tacks of what people from the different disciplines think. This has been quite successful and a lot will be accomplished. He favors an overall conceptual model of what you are trying to achieve.

The conceptual model concerns how you are addressing the ecosystem problems.

Jeep - work groups will come up with an infinite amount of studies and money. The SEA program had a ceiling. The TC has not given guidance before the thing started. I don't see a plan coming out of that process yet or coming out of the boxes.

Ted - there has been quite a bit of money spent on the experiment of the *Exxon Valdez*. Synthesis of that information has not been undertaken. The potential for what we learned is much higher. OSPIC is filled with information from investigators but how does that information help drive this process. We have spent a lot of money on this investigative situation but where are we. There is a need for synthesis and integration and to get the information out of OSPIC.

Alex - we are talking as investigators familiar with damage assessment and restoration. We are trying to develop a process where what you said happens annually.

Molly - I see that vision coming from the SRB. I don't see them as just project proposal reviewers. They will look at the work being done and say where is this going and how is it being integrated and what are the gaps. The scientists will then say how to fill the gaps and answer the questions.

Torie - there doesn't seem to be a clear accounting of where we are.

Alex - I see the work groups coming together and saying this is our highest priority. One thing missing is the opportunity to use information to feed back into the process.

Joe - the way I see the small boxes is here are the projects and what do you think. The coordination team will say what is the status of this animal and how does it fit with the others. They will say give me the status and connections, and then you bring that back up to your team from all the boxes and then you make a decision on what is important. You then send it back down. You may wind up with some of the same projects. You will be able to compare and can provide some leadership at that point on priorities.

Pete - I have some discomfort with having the working groups as the three big ovals at the bottom if the intent is how these things work together. The peer reviewers have spoken for this entire time for more interdisciplinary process-oriented intermeshing of programs to try to gain an understanding of how a signal is playing its way through the system. I am concerned this reflects more or less what we have been doing. If we used the bottom ovals, we would have a better opportunity to develop the broader questions. Part of the reason we didn't like that the other day was the notion this would be a huger group. If the guidance from the TC and Ayers is to take a broader ecosystem approach, I am uncomfortable that this will be accomplished.

Kathy - I come up with the same people for the bird and mammal groups. We would be better off to start off with what is the focus we want. You underestimate the ability of your PI's to prioritize. If you give them strong marching orders, you have some of the best

scientists working for you.

Byron - I agree with George's definition of what the ecosystem is.

Alex - when there is a meeting, all the groups should meet, regardless of which structure we take. The ecosystem components overlap.

Pete - you have these meetings at a common time and place and then resort them.

Alex - the working groups do not have to be exclusive. Someone could participate in the discussion of all working groups. I am concerned about relating this back to the constituencies in the settlement. Because of the broad public concern about taking the ecosystem approach, maybe that is the way to go.

Leslie - the questions for a sea otter and killer whale will be different. We look at the groups of animals, and they fit better in an ecosystem framework. These groups tweaked us and improved the way we thought.

Spies - the problems become the organizing principle. You put together the components of that and it becomes apparent what kind of disciplines you need.

Evelyn - that sounds like what we did for the SEA plan. I agree with Kathy about moving those boxes up. Put the shopping list of species in each of those ovals.

Alex - across the board, they overlap. You can't segregate by ecosystem components.

Evelyn - you need another box for data management.

Alex - that is a process.

Jerome S. - I think this is a good structure. I have heard a lot of confusion between the structure and the process. You start with the ecosystem and break it down. The responsibility of the TC is to say here is what we have done. If the ecosystem team has a project which has not been coordinated, then it won't get past Jim's desk. The SRB will make sure an approach is solid scientifically. The structure will work but the key is the guidelines. It is also important to manage the public input. Fishermen can gather a lot of data and will do it free. This is a great data opportunity. Their livelihood is tied to these critters' health, and they will collect a lot of data. Let's say this is a structure and get down to the nitty-gritty.

Alex - we will have to come to closure. In talking about public involvement, how do you envision this? It is easier to envision it in this type of structure. Usually the public is concerned about a particular injured resource.

Jim - I talked to a variety of people when I first came in and read many documents. I spent some time talking with the librarians and going through some material. I decided that at least for a while I would be representative of the public. You can't find out what the status of the injured species are from the information in this building . If want to know the status of fish, you have to go to something like the forum yesterday. There are varying reports about what is going on now. I decided the thing to do was to get a group of people to find out what the status was. The TC has said they want restoration based on an ecosystem approach. You could move the boxes or have another level but both things are probably correct. He will be glad when we get past the chart debate and discuss why do we have the situation we have with mammals. This chart does not obviate Kathy from having what she wants such as the good crisp debate in Cordova. Someone has to take this research and integrate it. This whole thing is for naught if we leave the public behind. The public has to know what is going on with the ecosystem, and they have got to participate.

John - this model is easier for the general public to understand. What will make the horizontal dotted line and the flow of information work is a mandatory transfer of information. It can be in written form. The strength of the process is integrating the various groups.

Jeff - I haven't heard much that can't be addressed by a cogent set of marching orders. We can address the synthesis problem by telling those groups to do it. We can address the leadership problem by telling them to forget anything that comes to more than a certain amount. Leadership is addressed by the fact that we are not starting from ground zero. Hopefully, much of what we already are doing is a good thing to do. It seems like we should get on with talking about how these groups are going to work. We need to discuss what are the marching orders and who will give them.

Alex - that was supposedly what we were going to do today.

Byron - when we get on with the responsibilities, we will see this is the right way to organize.

Karen - I am disappointed as a bird biologist. I have lots of contact with other bird people. It is shame to set it up as we have always set it up, and we should do something different.

Alex - no matter how you structure it, you have the problem of making those connections.

Kathy - we all acknowledge you need the cross bars. All the field scientists are begging you to do something different. I don't have a clue what the rest of the world is doing. Some of this information is relevant to what I do. It is hard to get together with them. Agency responsibility demands that I talk with some agencies.

Jim - why not reverse the boxes? I will keep pushing these types of meetings because it is where the cross pollination happens.

Alex - I am willing to change the boxes.

Spies - you want things totally integrated. You want members of the team to represent good scientists who can think broadly.

Don - I prepared my own overhead. You will scope what has to be done down below. The synthesis of data has been left out. All the people will be talking to each other. From that you will get proposals which get funded or not funded. Reports will then be cycled through the next synthesis meeting.

Jerome - this is a good process chart but we should go back to Alex's chart for structure. You have to have a series of three meetings where all agency people come together and talk about interaction and then you break out into teams. You have three sets of interaction that have to occur.

Alex - the only difference is that there are classes of injured resources.

Kathy - trophic interaction is my specialty but I now study harbor seals. The foundation for everything I do is interdisciplinary connections. When you quit communicating, you quit doing anything interesting. I believe that lip service does have some practical implications.

Jim - whether you draw the boxes up there or not, you will talk to mammal people. The first marching order would be to review and present where we are. That needs to happen.

Kathy - task 1 for your group would be to identify how they fit into the system.

Jim - you would form an interdisciplinary work group to share the information. Then you would develop interdisciplinary proposals with an integration of those interdisciplinary hypotheses. Then you would develop an interdisciplinary program.

Jeep - you would have a meeting, then divide up and discuss monitoring. You would identify the problems in the species groups. It will help lead the discussion when the large group comes together.

In order to go forward with the proposal process, you have to link it back to injury. You need a combination of reshuffling various parts of the process.

Ted - the ecosystem of an ecological pathway identified the rearing, natal and growth habitats of the species we were dealing with. We had a list of things to study. Injured

species can be used that way.

Break - 10:25.

Molly - we will set aside the discussion of structure. There is no complete consensus. We will move on towards process and what the tasks of these groups are. A subgroup can meet during lunch for further discussion.

Alex - both groups are talking about the same things but want emphasis on different aspects. He asked the group to vote on the following: Option 1 - what you see is what you get, Option 2 - eliminate the boxes, and Option 3 - integrate the two concepts.

Squares (Original diagram)
Circles
Squares/Circles

The following diagram of responsibilities and timeline was provided:

Responsibilities

1. Injured resources review to date/Annual Update
2. Identify strategies, research approaches, and testable hypotheses
3. Recommend priorities
4. Annual review (prior to TC October 31st meeting)
    1. resource status: across spill area
    2. strategies
5. Communication within and among groups

Coordination Team

March 23

ID coordinators: Identify scope of _____ link
Identify participants
Identify public participants (defined)

March 25

Develop initial contacts and additional contacts
Solicit strategies for general restoration

1994 Timeline for FY 95 Program

May 15:	Monitoring, habitat protection, research, general restoration Draft strategies for DRP, identify RFQ projects??
June 18:	DEIS/DRP released for public review
Aug. 15:	Publish draft 95 Work Plan 1. Initial strategies finalized 2. Resource status review (current injured resource list)
Mid-Jan. 1995:	Annual workshop 1. Synthesis of FY 94 work 2. 96 working group session

David - I have reviewed SEA plan, and it seems to have a lot of merit. We asked what are the big issues. There are a lot of questions. We recognize that we have a lot in common. We have written a brief prospectus. To explain this to the public, you have to get back to the injured resources. We have a hypothesis as the organizing principle. We need a comparable effort in the nearshore zone. There has to be communication in the working groups.

Pete - for the nearshore, we have made a start over the years.

Alex - for research approaches that take this interdisciplinary ecosystem approach and cross suites of injured resources, everybody is agreeing those should have the highest priority. That seems consistent with what we were talking about.

Molly - what is missing is what does this mean in terms of a system-wide problem. You need some discussion on what we know now.

Spies - you start with what are the problems. The second cut is the underlying problems. We could develop that line of reasoning for next year.

Alex - you could have someone examine ecotoxological impacts and what we know about the extent of damage. You will use the guiding principles when you get responses to do these things. You could come up with an infinite number of ways to synthesize.

The immediate deadline will be for having draft strategies. Byron has taken a lead on getting input on monitoring. An important component of monitoring will be the need to document restoration recovery or lack thereof.

Molly - at some point in February, you have the TC revise the 1995 Work Plan based on the workshop. That has to be factored if the workshop brings out any new information.

Alex - we are trying to get on a cycle where projects know they are going forward before February.

Molly - there is a need for discussion on whether the TC was right on what they voted on in October.

Alex - we have to recognize if we are going to get good science, we have to give some sufficient horizons to put the best programs in the field. This time lag is regrettable but necessary.

Bob - if as part of the workshop, you realize there is a gap, you go back to the TC.

Sandy - hopefully, some projects will become multi-year projects so we won't be stuck.

Sam - this abbreviated stuff wastes people's time. If you have the workshop, it has to be thorough and rigorous. I don't have a problem with a January date.

Jeff - I would go with January. If it is public, that argues for doing it right the first time.

Alex - the ecosystem coordination group and SRB should develop an agenda for this workshop.

Jerome - to have a proper meeting, it should be May or June.

Spies - it has to be everything you know at that point and looking forward to the future.

Sam - if you wait too long, you lose your purpose. You need some feedback.

Jim - will the dates preclude multi-year projects being funded? That should be a priority to establish multi-year funding.

Alex - there is a defacto commitment if a new project comes in and it has a multi-year funding horizon. In a sense, we are getting there. Maybe through the back door.

Byron - there is some calendar confusion. You are not up against any time wall.

Mark - yes, we are.

Molly - the list of strategies that will be the appendix to the Restoration Plan is not a laundry list of projects. It is general. It is approaches and things that will be modified by projects on an annual basis. We are looking for general strategies to meet our objectives. We are also looking for what kind of guidance we can give to the public.

Mark - many members of the public will not have access to electronic communication.

Kathy - one of the consequences of ecosystem research is you will have to think farther into the future; not for this year because we are stuck with it. You should get yourself a year ahead and build in a surprise field season. You have to start putting 1995 and 1996 on there and try to get a year ahead; otherwise, you will burn out your scientists.

Molly - if there is enough public review, people will feel more comfortable in having a date tied into the fiscal year.

A group will meet during lunch to reorganize the above timeline.

Lunch 11:50 - 1:30.

The subgroup developed the following diagram:

3/23	-ID work group coordinators -ID scope of participation (initial list)
3/29	-Mailing to participants from TC staff -Describe what we are doing and timeline
4/1	-Eric's survey and NOAA's monitoring surveys due back from agencies to Byron forwarded to W.G.C.
4/4	-2nd mailing
4/13-14	-Workshop - start with circles, then squares, then circles establish coordinating committees
4/15-5/7	-Develop draft strategies; projects; review/revise teleconference other small group meetings as needed
5/15	-Draft strategies published as part of general solicitation

Alex - having a workshop up front, the Executive Director has to decide what public participation can be supported.

Molly - money for travel is available.

Leslie - is the date of the workshop flexible? There is a Seward Science Center meeting on the 12th.

Molly - it might be easier to get that one changed. Are there any other major conflicts? Three days may be sufficient.

Kathy - I don't think significant numbers of people have been given money to start their field season so that won't be a conflict.

Molly - are there any suggestions for a place? We will do a cost estimate of where is the best place to have it.

Kathy - meetings have been held at Alyeska and Willow before.

Molly - that is a good idea. We will have staff explore this.

Alex - people seem to see the need for all the tasks. Whether we can accomplish them is something else. Another task for the groups could be the RFQ.

Kathy - it would be helpful to develop an example of a product you want to see.

Molly - we have that.

Bob - in addition to the NOAA monitoring survey, the results of Eric's survey should also go out on 4/1.

Alex - there are now two ovals instead of three on his diagram. The interdisciplinary work groups are still there but they are lumped together. Another structure, which is the old diagram, has the ecosystem components moved up indicating everything works together and is coordinated by the coordination team.

Jeff - we don't know what we want. Consequently, we need to maintain some fluidity. We might have a better idea of what we have after this workshop in April. We should maintain sufficient fluidity that nothing gets cast in concrete. He likes Spies' concept of going back and forth from squares to circles, back to squares. Fluidity is the main point. We should get these hypotheses and planning documents out on the table for discussion. One large group could experiment with which smaller groups are productive.

Molly - for the purposes of this workshop, if we start with the big circle and then break down into the squares and come back to the ovals, that would generate the work product we are looking for in that timeframe.

Joe - would it be fair to add a circle called humans, such as what the subsistence and recreation users need?

Mark - that needs to come from another angle. The tasks Joe is talking about don't come out of a research and monitoring plan.

Joe - I don't agree.

Eric - isn't that a public input process?

Kathy - aren't we including that in our study designs as we go.

Joe - I don't know that we are. Some people are too closely related to the resources.

Alex - I thought we would accomplish this by ensuring public participation at the planning level.

We are talking about injured services. Injured services are to be restored by restoring the injured resources.

Alex - I think what Joe wants is an oval for human services. I agree with Jeff we have to be fluid but we also have to send this out to colleagues and public constituencies.

David - you could list them in the injured resources interdisciplinary work group box.

Eric - I find this graphic confusing. It doesn't communicate effectively what it is meant to.

Molly - what people want to know is what we will try to do at the workshop and the goals and objectives.

Alex - we have all focused on graphics, and no one focused on the words.

Tracy - this is the diagram to include with the mailing. The other one is confusing. The point of the workshop is to bring them down to the focus of these major ecosystems.

Molly - stamp draft on it, and we will use it .

Alex - we need to talk about who is going to coordinate and start identifying a list of people so that Molly's staff can start getting the word out and getting the workshop on track.

Kathy - the executive arm should provide some guidance on whether these experts are to be from Alaska. You should define how broad you want to be.

Molly - I think it is open. If the expertise is here, fine. If there are those outside like Pete who are valuable assets to the process, we should get them. We should start with the coordinators.

Alex - we should return to the question of the coordinating committee and composition. The coordinating committee coordinates and Molly thinks it should do more.

Molly - the coordinating committee should include one or two staff people to ensure the groups are up and running.

Alex - the main role of the coordinating committee is coordination among the work groups and to make sure there is a flow of information. There is a necessity to work with the Restoration Work Force to facilitate agency administration and coordination. This group should make sure this happens. The participation in the annual workshops and

summarizing the results becomes the most important role so that we get products which are concise of where we are going with this.

Dave - George thought there should be someone in there to provide guidance and review early on.

Alex - if you let the work groups have a free hand in coming up with the range of possible, the possible is almost infinite. You will get research proposals that are large. Within the work groups, there is a charge to exercise self discipline and be pragmatic. The coordinating committee's role will be to discuss how you can constrain the scope of research to meet the limits and bring it back to the working groups from which it came. The people that are dealing with other projects that make their link into the restoration of other resources will have to facilitate that discussion.

David - do you foresee having a coordinating person from each of those boxes?

Alex - it is up to the work group to decide who will best represent that work group. Hopefully, you are not selecting resource specialists solely.

Byron - it seems that the coordination committee is responsible to ensure that every group is singing the same sheet music.

Alex - communication is important to ensure an integrated effort and a healthy ecosystem.

Molly - I am not convinced it is necessary to have a state and federal representative on the work force. I would throw out the need for two public members.

Alex - the meetings should be open to the public and not worry which public members you will support to attend. You will have to decide what level of support you will provide.

Molly - it will be a group that is required to set some priorities and help package some of this stuff. Otherwise, you are shipping it all up to the SRB and the TC for yes/no. Maybe there needs to be a two-step system for further refining and further work.

Alex - really they have more of an information exchange function. They need some guidance based on the management structure above them.

Mark - the task of making this all fit belongs down in the work groups so you can get public participation. The coordination group should be a conduit.

Alex - in order to meet the policy direction, you might have to go more to the ovals or define them as you go.

David - would it be helpful to bring in the SRB's role? How do you see the science review

committees interacting with the coordinating committee?

Alex - this is an argument for composition. We want to talk about duties. These duties are listed in the SRB strawdog handout.

Joe - the Restoration Work Force could bring people from the SRB down to the individual work groups and make sure they are plugged in. If the SRB could interface without actually being a part of, they could look at the products later.

Alex - work groups need to be able to access that expert guidance. You want to have an objective science review. You want the input to come in as guidance and final review and recommendation. I am not comfortable with the Restoration Work Force having that task. If we structure the work group by injured resource, we want to have the buffers to prevent that from collapsing. The coordination committee's main role is to make sure that happens.

Joe - if you are looking for administration essentially, that 's what you would get from the Restoration Work Force.

Alex - the agenda will set how you break apart and come together.

Pete - somewhere in this process, someone has to make hard choices.

Mark - what we are creating is the technical merit part and has no business looking at policy and social issues. We want to make sure we don't try to make science drive policy.

David - the TC can't make decisions about which science projects should go forward.

Alex - scientists will develop what is possible and recommend what is of the highest priority. It will be difficult for one scientist to say his issue is less important than another scientist.

Pete - the process should be seeded with ideas.

Alex - the assumption in the duties needs to be more specific regarding interaction with the work groups.

Pete - the coordinating committee becomes a choke point one way or another.

Alex - the best way to get these results is to set the boundaries ahead of time.

Pete - those bounds aren't easily allocated among the various groups.

Kathy - you will be amazed how innovative people can be if they have some guidelines to work with. You work within the resources available. Some guidelines would be helpful in generating realistic suggestions.

Alex - that would help the whole process to have those general targets.

Molly - so far the TC has not been willing to set those targets.

Jeep - they might be more willing if they have a strategy plan overall.

Alex - what Kathy says is right on. If there is no boundary, it is very possible that the proposal process will expand.

Molly - it is always her thinking that if someone above is making decisions about what you do day to day, the working biologists would like a chance to say what they think should go forward. That is through the coordinating committee. That is developing a priority. I don't see it as a choke point. Taking everything and shipping it up to the SRB is irresponsible.

Alex - we should bring the issue into the workshop regarding how much work groups are willing to delegate authority to this committee. How much are each of us willing to say we are willing to live with what the committee says?

Jim - the working groups have to have some idea of what the funding levels are that they have to work with. The idea that you can prioritize an ecosystem study and then cut parts out is a fallacy. Your whole structure may fall apart.

Veronica - you should consider at the April workshop two or three sideboard packages. I doubt the TC will commit themselves to a certain figure. There have been a number of times they've been embarrassed because they have had to cut the line on a project for which they didn't fully understand the ramifications. It would help to have a couple of different options.

Alex - that is a good point.

Ted - an informed scientific board composed of scientists not entangled in the research should be in a position to make recommendations on guidelines for funding. It is exceedingly helpful to know what sort of money is available. It is helpful to know how many people can be involved. It could come from the SRB.

Byron - Jim could give you guidance on what is easy or what is problematic.

Leslie - we have some idea of what is absurd, and we step down from that. I agree that the scientists and the teams could provide the best guidance of what things could be

accomplished and where there may be agency dollars. Team members could do that and put together a package to allow the TC and SRB some options.

John - with respect to prioritization of issues, I would be reluctant to let it fall back to the work group level.

Alex - how do we describe what the coordination group will do?

Mark - coordinate.

Break - 3:00.

Alex - we should come to some closure on the composition of the coordinating committee. Molly said she didn't see that the Restoration Work Force needed to be represented. There should be a representative from each work group.

Kathy - the work group should recommend its representative to the coordinating committee. These could be wild-card scientists.

Alex - will there be a seat for selected public or is that covered in the planning process?

John - he is not sure how much you gain by having an official public member.

Alex - that gives us an eight-member committee.

We need to talk about who would be willing to do any of the coordination in this information structure. We need names of people willing to generate a list of participants for this process. I was relying on Sandy to do the archaeology.

The following people will put together the list for the first level of communication:

Fish - Jeep, Cooney, Baker, French
Mammals - Frost, Dahlheim, Bodkin
Nearshore - Irvine, Collier, Short, Highsmith
Birds - Irons, Wright, Hatch
Archaeology - Rabinowitch

There will definitely be money for public participation. It will be defined in terms of constituent interest in these resources.

Gail - what are we to do?

Alex - generate a list of people who should be notified of what we are doing and when. Put forth a list of people whose expertise is required and people who would represent the

public in the context of these working groups. This information should be forwarded to Alex. He will work with Bob and Molly to try to coordinate this.

Brief break to develop lists.

Alex - presumably you have generated some first cuts of mailing lists, input to Molly and Jim on public participants, and input on who needs to be supported (particular expertise). The question next is what is going to happen when we get to the meeting. What we will do in the mailing is describe where we are trying to go with this structure and what the responsibilities of the work groups will be and what we expect out of the next meeting. Bob made up a template with sea otters as an example with the recovery objectives.

Bob - a lot of this was cut and copied.

Alex - one continuing debate is how specific and how generic do you make these things. The more generic, the more they can relate to a broader suite of interdisciplinary. We have to see how this is working up to our ecosystem components identified at the previous meeting. This is a very species-oriented look. It is also a requirement of the Restoration Plan.

Kathy - you basically want all of these in terms of single-species approaches.

Bob - you need to do it the way you need to do it.

Alex - the challenge of this group is to make sure the research strategies are identified.

Bob - this is not an attempt to re-constrain your thinking back into the boxes.

Alex - these things hang under ecosystem components. The overall goal is still defined in terms of a healthy ecosystem component.

Bob - you could write the synthesis by ecosystem type. You need to have some way to intellectually make the link.

Kathy - I would like an example of what you envision in starting with an ecosystem approach.

Bob - SEA plan fits this approach.

Kathy - you should draw up a mock example.

Alex - maybe we should do this as a group. We need to define the strategies.

Scott - we need to know the status of the population and fecundity. We don't have anything to measure it against. So we have to measure it against other populations.

Alex - the next step for these groups is the hypotheses. He is still working from the paradigm Jim defined of management by objective.

Molly - one problem with this whole process is trying to explain in simple terms what the TC is doing and why they are doing it. Jim wants to be able to say what we are doing because a species was injured.

Gail - that could be the next step. You look at the complexity and the strength of interaction and write a summary.

Kathy - it is intuitively easier to explain it from the top down.

Alex - we will challenge the groups to come up with the priority ecosystem hypotheses and then we can take these into the structure. You may have an ecotox hypothesis of greater weight.

Kathy - this is the level of detail you are looking for and the approach?

Bob - it could be more detailed.

Molly - we could have a group develop a couple of examples and circulate it during the mailout.

Bob - until you come up with a variety, it is real hard to write it backwards. Until we come up with the ecosystem hypothesis, it is real hard.

Alex - some species may be very single-species ecotox. Some new stable equilibrium may have to be disturbed to get recovery. Different paths will evolve from these different resources.

Kathy - this product may be a lot like the diagram we fought about all morning.

Alex - does anyone have a problem with having two big circles instead of three? We want to make sure the research strategies are possible with the understanding that there may still have to be some species specificity.

David - do you plan to start at ground zero?

Alex - if the core wants to begin flushing out, then that will help the process.

David - with all new people who don't know what is going on, you have to take time to

explain to them, and then the meeting is over.

Molly - do we have a coordinating committee?

Alex - yes.

Molly - there will be a mailing to the participants and then another mailing with some substance on the 4th.

Jim - we need to keep in mind that Appendix D is part of a document that is part of the Restoration Plan in general. You would stop short of specifying the exact hypothesis for say sea otters.

Alex - we are going to formulate a strategy to achieve those objectives from an ecosystem approach. It is going to come from a broader view.

Eric - hypotheses are by nature things that evolve and are subject to change. For purposes of the appendix, it is important to recognize that what is articulated is not in concrete and doesn't in any way restrict future research activities.

Alex - you are saying you need an exercise?

Kathy - you ought to hire staff to separate your product into levels.

Jim - you want the workshop to discuss the things people are leaping to discuss.

Eric - we want the work to go on but the way they are articulated in the appendix should not be something immutable.

Alex - the hypotheses are not going into the appendix but they are going to be released as guidance to the 1995 proposal solicitation.

Jim - the 13th and 14th meeting is to bring in the interdisciplinary approach.

Alex - staff will come up with some generic strategies. We will come forward with monitoring strategies, restoration strategies, and they will be run by the work group. If they have problems, they can say so. The nitty-gritty of the workshop will be to start this hypothesis development. It will go out as guidance for the 1995 Work Plan.

Byron - why would staff do some draft generic strategies?

Alex - it will be used for a look to make sure everyone is on board.

Jim - what has not been done is what are the ecosystem approaches we are going to

take in looking at harbor seals in an interdisciplinary fashion. That is what you would do in building your 1995 Work Plan. In order to accomplish our responsibility of having a plan, there will be a goal, a specific objective and under that some language about developing interdisciplinary hypotheses annually. All that is part of Appendix D. We are developing two things: 1) the overall Restoration Plan, including Appendix D, and 2) the guts of the hypotheses. We are going to try to do those simultaneously.

Bob - it would take awhile for him to come up with one for the SEA plan. It is not quite so easy.

Alex - the main thing to come from the SEA plan is the articulation of the hypotheses.

Jim - we would set up a cycle of how to review hypotheses efforts. We will continue to respond to when to bring in the other scientists based on the Chief Scientist's recommendation. It is expensive, and we just have to decide what is the best use.

Alex - the core groups will take a stab at articulating some example hypotheses by Tuesday.

Molly - these are ideas.

Kathy - these are straw hypotheses to generate thought at the workshop.

David - one objective of the meeting would be to get new ideas and evaluate existing ones.

Alex - we are talking about strategies for guidance of the 1995 Work Plan.

David - at the meeting, you want to see if there are more hypotheses out there.

Bob - and which ones you think the TC should pursue.

David - to evaluate the hypotheses, you need the background on them.

Marilyn - you will have to bring people up to speed.

Kathy - the people you invite ought to be on line in their thinking.

Alex - David means are we going to have some agenda set for the presentation. I guess I don't see that.

Kathy - you have to figure out what happened in Cordova and what was accomplished. This is number two in the workshop series, and we shouldn't treat it as the first one.

Molly - the steering committee report should be included in the mailing.

Alex - we have this need to integrate the pieces into a whole and bring in what the groups come up with and then take it back to the groups the next afternoon.

Kathy - Molly should let the participants know what their assignment is. They should come to the meeting with discussion items in hand.

David - if you don't go in with an agenda, you will not have a successful meeting. It should not be a free-for-all.

Alex - should each group give a 15-minute presentation?

David - they will be in a position to do that.

Eric - did we decide on a group taxonomy?

Alex - yes.

John - I liked Kathy's idea of making assignments. If we don't jump start this, we aren't going to get a lot done.

Tracy - because there was an agenda within the other workshop, everyone was focused on their specific questions.

David - he could envision a plenary session and then working in smaller groups and finishing in a joint session. There ought to be some time in the beginning to lay out general ideas.

Alex - you mean narrow the focus? We need some ecosystem gurus. We went through some of this before. We have to make the connection because not all the same people will be there. We need some direction from the Executive Director and the TC. We could have the core groups present the types of hypotheses they have put out.

David - by Tuesday, there may be three groups prepared to make some presentations. You could probably kill half a day on that and then get back together and summarize.

Alex - you have to go through an iteration of breaking up and getting back together.

Molly - we need to get the core group together and work out an agenda in the next couple of days. We can do a draft and distribute it.

Byron - what will be the size of the workshop.

Molly - big, but it depends on how many respond. What was in Cordova? 50? 60?

Alex - we will get some feedback from the core group on hypotheses.

Molly - Wednesday is better.

Alex - we will then start to pin down the concept of an agenda. We talked about two scientists-at-large. In terms of mailing the draft, I will suggest that the five representatives from the working groups elect those two scientists. Does anyone have a problem with that?

Byron - are you talking about peer reviewers?

Alex - they may or may not be.

Byron - it is administratively difficult to pay for the travel.

Meeting adjourned at 5:00.

SIGN-IN SHEET

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING SIGN-IN SHEET

March 21, 1994

NAME (Please Print)	ADDRESS	AFFILIATION
Jeff Short	Auke Bay Lab 11305 Glacier Hwy, Juneau	NMFS
Alex Wertheimer	Auke Bay Laboratory 11305 Glacier Hwy, Juneau, AK 99801	NOAA/NMFS
Dan Hull	6541 Bridget Circle Anchorage, AK. 99502	PWSFERPG/PWSAC
TORIE BAKER	PO BOX 1159 CORDOVA, AK 99574	PWSFERPG/EDFU
Pete(CH) Peterson	Univ. of North Carolina Institute of Marine Sciences Morehead City, NC 28557	Peer Reviewer for UNC
BYRON MORRIS	NOAA/NMFS OILSPILL OFFICE P.O.B 210029, AUKE BAY AK 99821	NOAA agency liaison
Marilyn Dahlheim	NMFS/NMML 7600 Sand Pt. Way Seattle, Wa. 98115	NOAA
BOB SPIES	APPLIED MARINE SCIENCES 2155 LOS POSITAS CT., SUITE "I" LIVERMORE, CA	ANS
Jerome Montagna	ADF&G 1255 W. 8th ST. Juneau, alaska 99801	ADF&G

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING SIGN-IN SHEET

March 21, 1994

NAME (Please Print)	ADDRESS	AFFILIATION
Donald Schell	Inst. of Marine Science UAF Fairbanks AK	
Eric Myers	645 G St/Anch./99501	Trustee Council
Veronica Gilbert	645 G. St. - Anchorage	ADNR
Andy Gunther	Applied Marine Sciences 2155 Las Positas Ct, Suite S Livermore CA 94550	Office of the Chief Scientist
Molly McCammon		Trustee Council
Ray Thompson	3301 'C' Street suite 301 Anchorage, AK 99503	USDA Forest Service
Joe Sullivan	ADF&G 333 Raspberry Rd. Anchorage, AK 99516	AK. Dept. of Fish and Game
John French	900 Trident Way Kodiak, AK 99615	Fishery Industrial Technology Center University of Alaska Fairbanks
David Irons	1011 E Tudor Rd Anchorage AK 99503	US Fish & Wildlife

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING SIGN-IN SHEET

March 21, 1994

NAME (Please Print)	ADDRESS	AFFILIATION
David Duffy	Alaska Natural Heritage Program UAA 707 A Street, Anchorage Ak 99501	AKNHP- UAA
Gail K. Evanoff	Chenega Corporation POBox 8060 Chenega Bay	
Kathy Frost	ADF&G 1300 College Rd Fbks 99701-1599	ADF&G
Mark Broderson	ADEC 410 Willoughby Ave Suite 105 Jnu 99801	
DAVE GIBBONS	U.S. Forest Service P.O. Box 1628 Juneau	
Bruce Wright	P.O. 210029 Juneau AK 99801	NOAA, NMFS
Bob Loeffler	EVOS, Anch	DEC
Sandy Rabinowitch	2525 Gambell St. (NPS) Anch. Ak, 99501	DOI
Jeep Rice	Auke Bay Lab 11305 Glacier Hiway, Juneau	NMFS

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING SIGN-IN SHEET

March 21, 1994

NAME (Please Print)	ADDRESS	AFFILIATION
Leslie Holland-Bartels	1011 E. Tudor Rd Anchorage AK 99503	Alaska Fish & Wildlife Res. Center National Biological Survey
Kim Sundberg	ADF&G 333 Raspberry Rd Anchorage 99518-1599	Habitat / Restoration Division
Tony DeGange	1011 E. Tudor Rd. Anchorage, AK 99503	US Fish & Wildlife Service
Tracy Collier	2725 Montlake Blvd E Seattle WA 98112	NOAA/NMFS
Bill Hines	P.O. Box 21668 Juneau, AK 99802	NOAA/NMFS
GEORGE ROSE	~~WHITE~~ HILLS RD. P.O. BOX 5667, A1C5X1 ST. JOHN'S, NF CANADA	DEPT FISHERIES & OCEANS, CANADA, SCIENCE BRANCH, ST. JOHN'S, NF CANADA

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING SIGN-IN SHEET

March 21, 1994

NAME (Please Print)	ADDRESS	AFFILIATION
Mark Willette	P.O. Box 669, Cordova, AK	AK Dept. of Fish & Game

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING SIGN-IN SHEET

March 23, 1994

NAME (Please Print)	ADDRESS	AFFILIATION
Kathy Frost	1300 College Rd Fairbanks AK 99701-1599	Ph 907 456-5156 ADF&G
Bob Spies	APPLIED MARINE SCIENCE 2155 Las Positas Ct, Ste S Livermore, CA 94550	APPLIED MARINE SCIENCE
Jerome Montague	1255 W. 8th St. Juneau AK 99801 465-6960	ADF&G
Sandy Rabinowitch	2525 Gambell St. ANCH. AK. 99503	DOT
Marcia Dahlheim	NMFS/NWAMML 7600 Sand Pt. Way NE Seattle, WA 98115	NMFS
CH Pete Peterson	UNC Inst. of Marine Sciences Morehead City, NC 28557	Peer Reviewer
BYRON MORRIS	NOAA/NMFS POB 210029 AUKE BAY, AK 99821	NOAA Agency Liaison
TORIE ~~BAKER~~	PO BOX 1159 CORDOVA AK 99574	CDFU
Tracy Collins	NOAA/NMFS Seattle	NOAA

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING SIGN-IN SHEET

March 23, 1994

NAME (Please Print)	ADDRESS	AFFILIATION
Bruce Wright	P.O. Box 210029 Auke Bay AK 99821	NOAA
Jeep Rice	〃 〃 〃 〃 〃 〃	NMFS Auke Bay
John French	900 Trident Way Kodiak AK 99615	FITC - UAF
DAve GIBBONS	P.O. Box 1628 Juneau, AK 99801	U.S. Forest Service
Bob Loeffler	EVOS	DEC
Mark Brodersen		DEC
Gary Thomas	P.O. 705 CORDOVA	SCI. CTR
Jeff Short	Auke Bay Lab 11305 Glacier Hwy Juneau, Ak	NMFS/NOAA
Alex Wertheimer	Auke Bay Lab Juneau	NMFS/NOAA

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING SIGN-IN SHEET

March 23, 1994

NAME (Please Print)	ADDRESS	AFFILIATION
DK Salmon	Box 705 Cordova 99574	PWS Science Center PWS Oil Spill Recovery Institute UAF Inst. of Marine Science
Leslie Holland-Bartels	1011 E. Tudor Rd Anchorage AK	AK Fish & Wildlife Res. Center NBS
Scott Hatch	1011 E. Tudor Rd. Anchorage, AK 99503	NBS AK Research Ctr.
Jerome Selby	710 M.Z. Bay Rd Kodiak AK 99615	Kodiak Island Borough
Karen Laing	1011 E. Tudor Rd Anchorage, AK 99503	US Fish and Wildlife Service
Jim Bodkin	1011 E. Tudor Rd. Anchorage, AK 99503	NBS AFWRC
Ted Cooney	IMS UNIV. ALASKA FBX 99775	UAF
Mark Willette	AK Dept Fish & Game Bx 669 Cordova AK	ADF&G
George Rose	SCIENCE BRANCH, PO BOX 5667 ST. JOHN'S, NF CANADA A1C5X1	DFO CANADA

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING SIGN-IN SHEET

March 23, 1994

NAME (Please Print)	ADDRESS	AFFILIATION
Molly McCammon	645 G St.	Trustee Council
Don Schell	Inst. of Marine Science Univ. of Alaska 99775	
David C. Duffy	ENRI/707 A Street	AKNHP/UAA
Ken Hill	Box 1290 Cordova AK 99574	PWS Sc. Center,
Sam Shaw	P.O. Box 529 Cordova AK. 99574	ADF+G
Eric Myers	645 G Street	Trustee Council
Joe Sullivan	333 Raspberry Rd. Anchorage, AK 99518-1599	ADF+G
Evelyn Brown	ADFG Box 669 Cordova AK 99574-0669	ADF&G
Dan L Ivons	1011 E Tudor	USFWS

ECOSYSTEM-BASED MANAGEMENT STRUCTURE MEETING SIGN-IN SHEET

March 23, 1994

NAME (Please Print)	ADDRESS	AFFILIATION
Donna Fischer	Box 395 - Valdez AK 99686	City of Valdez - PWG member
Doug Griffin	307 - Valdez, AK 99686	City Manager - City of Valdez
Veronica Gilbert	645 G. St. - Anch	EVOS - ADFG

HANDOUTS

3/18/94

DRAFT

AGENDA

Implementation Management Structure — Work Session 2

Anchorage Restoration Office • 645 "G" Street
March 21, 1994 — 9:30 am
(PLEASE note change in time.)

I. Introduction (Jim Ayers)

— update on Trustee Council activities:
- FY 94 Work Plan implementation
- Habitat Protection/Acquisition
- 5th Anniversary Public Forum

— the Implementation Management Structure in context:
- the Draft Restoration Plan
- the Restoration Plan EIS
- annual work plans
- integrated research and information management

II. Review of Work Session #1 Products (Bob Loeffler)

— Mission Statement
— Definitions
— Guiding Principles
— Injured Resource Matrix
— Goals and Objectives

III. Organizational Structure/SRB (Alex Wertheimer/Mark Brodersen)

IV. FY 95 Work Plan Development

— FY 95 Work Plan Timeline/Process (Bob Loeffler/Veronica Gilbert)
— Survey of FY 95 Priorities - Summary (Eric Myers)
— Monitoring Strategy Identification (Byron Morris)

V. Restoration Work Group Discussions

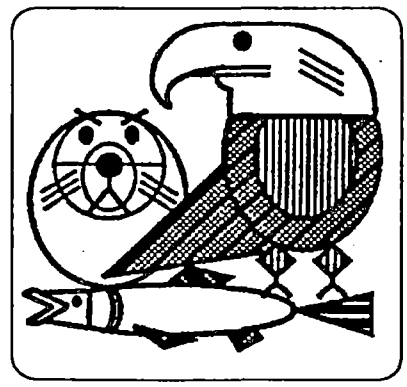
DRAFT

FY 94 WORK PLAN PROJECTS

as approved by the

EXXON VALDEZ TRUSTEE COUNCIL

January 31, 1994



State of Alaska: Departments of Fish & Game, Law, and Environmental Conservation
United States: National Oceanic and Atmospheric Administration, Departments of Agriculture and Interior

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 "G" Street, Anchorage, AK 99501
Phone: (907) 278-8012 Fax: (907) 276-7178

TO: Interested Parties

DATE: February 4, 1994

SUBJ: FY 94 Work Plan Projects

Please find attached the following materials:

- a summary of the *Exxon Valdez* Trustee Council approved actions regarding the FY 94 Work Plan Projects (minutes of the Trustee Council meeting on January 31, 1994); and
- a spreadsheet showing the detailed guidance approved by the *Exxon Valdez* Trustee Council regarding FY 94 Work Plan Projects.

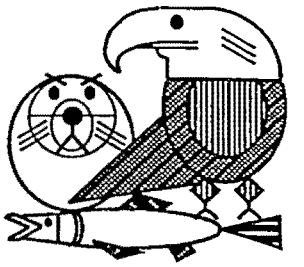
Together, these two documents and the associated attachments identify the FY 94 Work Plan Projects as approved by the Trustee Council at the January 31, 1994 meeting.

attachments

DRAFT

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 G Street, Suite 402, Anchorage, Alaska 99501
Phone: (907) 278-8012 Fax: (907) 276-7178



TRUSTEE COUNCIL MEETING ACTIONS

January 31, 1994

By James R. Ayers
Executive Director

Members Present:

Trustee Council

John Sandor (ADEC)■
Mike Barton (USFS)♦■
Bruce Botelho (ADOL)●
Carl Rosier (ADF&G)■
Steve Pennoyer (NMFS)■
Paul Gates (USDOI)●

♦ Chair
● Alternates:
George Frampton served as alternate for Paul Gates until 5:00 p.m.
Craig Tillery served as alternate for Bruce Botelho
■ Teleconferenced from Juneau

1. Public Advisory Group Meeting Report

APPROVED MOTION: Approved PAG recommendation to have staff explore more cost-effective ways of implementing projects and to report back to the PAG.

2. Science Update

APPROVED MOTION: Approved that a public presentation be held before May on the results of recent studies and the status of injured species. The Executive Director will work with the Alaska Department of Law to ensure such a presentation doesn't create undue problems for ongoing litigation.

DRAFT

3. 1994 Work Plan

APPROVED MOTION: Approved adoption of 1994 Work Plan Project Budgets (see Attachment A) as recommended by Executive Director with these amendments:

a) Project 94007 - Directed Executive Director to explore the possibility of RFP prior to the release of funds and to involve local communities and private organizations in the effort.

b) Projects 94110 and 94126 - Adopted with additions included in a resolution by John Sandor (Attachment B).

c) Project 94199 - Approved financial support with additions included in a resolution proposed by John Sandor (Attachment C). Approved up to $50,000 to complete work on those tasks.

d) Projects 94255 and 94258 - Deleted contingency of Executive Director review of project and consideration of normal agency responsibility and technology.

e) Project 94320 - Approved conditionally with direction to Executive Director to identify what elements of the projects are time sensitive and inform the Trustees of these; and to come back with detailed work plans and peer review of these in 30-60 days for a teleconferenced briefing and approval. Also directed Executive Director to work with federal and state attorneys to provide legal advice on hatchery funding.

f) Project 94422 - Adopted Option A for development of alternatives to be used in the Draft Environmental Impact Statement.

g) Project 94425 - Approved $20,000 in funding to NOAA to lower publishing costs of a book on the Impacts of EVOS on Marine Mammals and ensure a broader distribution of the book.

h) Authorized the Executive Director to proceed with those projects identified as still requiring NEPA compliance only after successful completion of all NEPA requirements.

ADDITIONAL ACTION:

APPROVED MOTION: Approved resolution in appreciation of former Trustee Charlie Cole.

APPROVED MOTION: Approved resolution in appreciation of Interim Administrative Director Dave Gibbons.

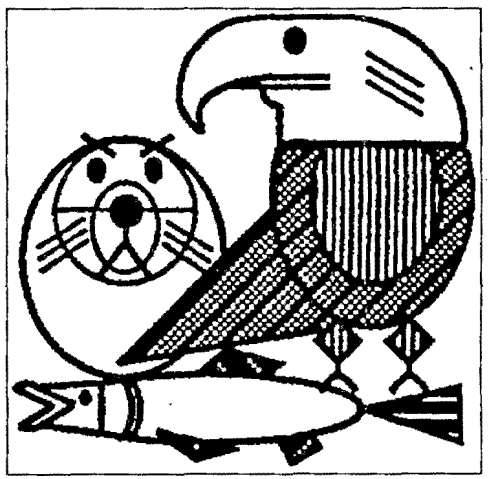
APPROVED MOTION: Directed Executive Director to attempt to obtain legal opinions about EVOS funding of hatcheries and make them part of the public record.

APPROVED MOTION: Directed Executive Director to meet with Koncor Forest Products Company President John Sturgeon concerning his recommendation for working with private landowners on potential cooperative projects.

The Trustee Council meeting recessed to a teleconference to be scheduled in 30-60 days.

ATTACHMENT

FY 1994 WORK PLAN PROJECTS



DRAFT

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

DATE PRINTED: FEBRUARY 4, 1994

Agency	Project Title	Location	Category G	Category M	Category H	Cost FFY 94	NEPA Y/N	Public Advisory Group				Public Comment		Chief Scientist's Recommendation	Trustee Co Action	FFY94 ($000's)
										L	N	A	Support	Oppose			
94007	Site Specific Archeological Restoration	Spill area	G			$331.2	Y			4	1	0	7	1			$445.1
ADNR						Amount Approved in 1993 Court Request: $154.4	$0.0 EA done								24 sites already identified. Further search for injured sites; recovery of materials; site repair. If approved, review budget. Approve.	Approve. Combine with project 94386 to develop cost-effective plan for protection of injured resources on public lands while involving local communities in determination of appropriate strategy. Explore use of private organizations to implement.	
94015	Archeological Site Stewardship	Spill area	G			$217.7	N	3	3	2	3	0	4	1			$0.0
ADNR							$0.0								Without a current status report, program effectiveness not known. No recommendation.	Disapprove. Questions concerning effectiveness of approach.	
94020	Black Oystercatcher Interaction	PWS		M		$131.6	N	2	5	2	1	0	3	1			$0.0
DOI-FWS	with Intertidal					Amount Approved in 1993 Court Request: $17.3	$0.0								Unclear whether oystercatchers in oiled sites are accumulating significant amounts of oil from their environments. Population differences could have existed prespill. Skip a year until all reports reviewed, accepted and state of injury assessed.	Disapprove. Needs completion of 1993 report and synthesis of available information. Review as part of 1995 Work Plan.	
94039	Common Murre Population Monitoring	Kodiak		M		$200.3	N	2	3	4	1	1	4	1			$200.3
DOI-FWS						Amount Approved in 1993 Court Request: $26.9	$0.0								Projected recovery times are long, monitoring every 3-5 years is most appropriate. Skip 1994	Approve. Evaluate further study needs in 3-5 years.	
94040	Reduce Disturbance Near Injured	Kod, Ken, AkP	G			$44.8	N	2	0	4	5	0	4	1			$0.0
DOI-FWS	Murre Colonies						$0.0								Could help speed recovery of murres at Barren Islands. Recommend funding for 1 year.	Disapprove. Consider other methods.	
94041	Introduced Predator Removal	AK Pen	G			$146.6	Y	6	2	1	2	0	3	1			$84.0
DOI-FWS	from Islands						$0 EA done in '85								This could benefit murre populations out of spill area. Fund feasibility on only 1 island in '94.	Approve with reduction to two islands and reduce budget from $146.6 to $84.0 with concurrence of lead agency.	

[Y=Yes, NEPA compliance required (either an EA or EIS needed) N=No EA or EIS needed (project eligible for categorical exclusion)]

[Note: Public comment figures are only for those written comments received prior to the Trustee Council meeting January 31, 1994]

[LOCATION: PWS=Prince William Sound, KEN=Kenai, KOD=Kodiak, AkP=Alaska Pen][COST: Federal Fiscal Year 1994] [PAG: H=High, M=Medium, L=Low, N=No, A=Abstain] [CATEGORY: G=General, M=Monitoring, H=Habitat]

DRAFT

		Location	G	M	H	FFY 94	Y/N	H	M	L	N	A	Support	Oppose	Other Scientist's Recommendation	Trustee Council Acti	FFY94 ($000's)
94043	Cutthroat & Dolly Habitat Restoration	PWS	G			$182.7	Y			3	1	0	6	1			$0.0
USFS	in Prince William Sound						$3.5								Improves freshwater habitat for both species. Approve.	No implementation pr NEPA compliance. Combine with project # 94139 and eliminate overlapping costs.	
94064	Harbor Seal Habitat Use	PWS		M		$0.0	N						4	1			$0.0
ADF&G	and Monitoring					Amount Approved in 1993 Court Request: $270.2	$0.0								Population may be stable in PWS; declining elsewhere. Population monitoring and developing information on movements by radio tagging still needed for restoration. Approve.	Already approved.	
94066	Harlequin Duck Recovery Monitoring	PWS		M		$147.6	N	1	4	4	1	0	3	1			$0.0
ADF&G						Amount Approved in 1993 Court Request: $139.3	$0.0								Results of previous work needs completion and review before more work undertaken. Recovery process may be slow. Skip 1994.	Disapprove. Defer funding pending completion of 1993 report and synthesis of available information. Review as part of the 1995 Work Plan. Strongly urge federal and state agencies consider further restriction on sport hunting.	
94068	Deposit Sand to Promote Clam	PWS	G			$36.4	Y	0	0	7	3	0	4	1			$0.0
ADF&G	Recruitment						$2.0								Success of project depends on number of assumptions. Feasibility study seems warranted if review of detailed proposal favorable. Approve pending review.	Disapprove. Even if proven feasible, not possible on large scale.	
94070	Restoration of High Intertidal Fucus	PWS	G			$285.8	Y	5	0	4	1	0	5	1			$0.0
ADF&G							$5.0								Investigators report that the upper intertidal zone is showing signs of recovery; restoration methods are probably not needed now. Disapprove.	Defer consideration to 1995 to determine rate of natural recovery.	
94081	Recruitment Monitoring of	PWS		M		$206.7	N	0	2	8	0	0	5	1			$0.0
ADF&G	Littleneck Clams						$0.0								Reports of previous projects need completion; personnel qualifications will be key to evaluating proposed project. Needs further consideration. Costs appear too high to accomplish main objective. Suggest competing proposal if funded.	Disapprove. Substantial study design limitations.	

[Y=Yes, NEPA compliance required (either an EA or EIS needed) N=No EA or EIS needed (project eligible for categorical exclusion)]

[Note: Public comment figures are only for those written comments received prior to the Trustee Council meeting January 31, 1994]

[LOCATION: PWS=Prince William Sound, KEN=Kenai, KOD=Kodiak, AkP=Alaska Pen][COST: Federal Fiscal Year 1994] [PAG: H=High, M=Medium, L=Low, N=No, A=Abstain] [CATEGORY: G=General, M=Monitoring, H=Habitat]

Project / Agency	Title	Location	G	M	H	FFY 94	Y/N	H	M	L	N	A	Support	Oppose	Recommendation	Action	FFY94 ($000's)
94083 NOAA	Monitoring of Oiled and Treated Shorelines	PWS		M		$616.6	N $0.0			6	6	0	5	1	Although it would be desirable to consolidate this with other intertidal projects, need for site continuity prevents this economy. Approve, if not for full amount, provide partial funding. Second alternative would be funding in 1995.	DOL and DOJ indicate ect does not meet the terms of \. Due to legal concerns, consider funding using federal criminal restitution funds.	$0.0
94086 ADF&G	Herring Bay Experimental and Monitoring Studies	PWS		M		$531.4 Amount Approved in 1993 Court Request: $198	N $0.0	2	0	5	3	0	4	1	Investigators have seen major change in recovery of upper intertidal zone. Skip 1994 or reduce scope and consolidate with other intertidal projects.	Approve contingent upon a revised scope of work and budget focused on intertidal resources.	$531.4
94090 NOAA	Mussel Bed Restoration & Monitoring	PWS, AkP	G			$616.7 Amount Approved in 1993 Court Request: $158.1	Y $5.0	4	7	0	2	0	8	1	A study component should be added that measures reduction in oil under beds in order to determine when objective is met. Reduce in scope through consolidation with other intertidal projects.	No implementation prior to full NEPA compliance. Approve. Coordinate with project # 94266 (Shoreline Assessment) for additional cost savings.	$518.0
94092 NOAA	Killer Whale Recovery Monitoring	PWS		M		$129.4 Amount Approved in 1993 Court Request: $33.7	N $0.0	0	0	2	11	0	3	4	AB pod does not have to be studied every year until recovery. Credible work proposed in 1994 by independent group. Skip 1994.	Withdrawn by agency. Defer consideration until 1995.	$0.0
94102 DOI-FWS	Murrelet Prey & Foraging Habitat in PWS	PWS		M		$231.5	N $0.0	1	7	3	0	0	3	1	Controlling factors for population not known. Nesting habitat addressed in 93 and study of foraging habitat proposed for 94. Coordination with forage fish study necessary. Approve pending acceptable study plan showing coordination with other studies.	Approve contingent on integration with projects 94163 (Forage Fish) and 94173 (Pigeon Guillemot), and elimination of overlapping costs.	$231.5
94110 ADNR	Habitat Protection - Data Acquisition and Support	Spill area			H	$405.1 Amount Approved in 1993 Court Request: $273.6	N $0.0	4	1	2	5	0	8	1	Continuation of this project is necessary to develop objective criteria, to apply these criteria to land parcels in the spill area, and to rank parcels for protection. Approve.	Approve in conjunction with development of a comprehensive habitat protection plan that covers the spill area and is linked to protection of key injured resources. See Attachment B.	$405.1

DRAFT

[Y=Yes, NEPA compliance required (either an EA or EIS needed) N=No EA or EIS needed (project eligible for categorical exclusion)]
[Note: Public comment figures are only for those written comments received prior to the Trustee Council meeting January 31, 1994]

[LOCATION: PWS=Prince William Sound, KEN=Kenai, KOD=Kodiak, AkP=Alaska Pen][COST: Federal Fiscal Year 1994] [PAG: H=High, M=Medium, L=Low, N=No, A=Abstain] [CATEGORY: G=General, M=Monitoring, H=Habitat]

DRAFT

																			($000's)
94126	Habitat Protection & Acquisition Fund	Spill area			H	$875.4	N			1	5	1	10	1					$875.4
ADNR						Amount Approved in 1993 Court Request: $284.9	$0.0								This provides the funds for protecting lands identified by the habitat protection group (94110). Approve.	Approve in conjunctio... development of compr... habitat protection strategy covering the spill area, linked to protection of injured resources. Negotiation process, final fund allocation to be worked out by Executive Director. See Attachment B.			
94137	Stock ID of Chum, Sockeye, Chinook and Coho in Prince William Sound	PWS	G			$214.9	N	3	3	3	1	0	10	1					$214.9
ADF&G						Amount Approved in 1993 Court Request: $46.7	$0.0								It may never be possible to know if these species were affected by the spill. Trustees are already carrying out a program for enhancement of sockeye salmon in Coghill Lake. Disapprove.	Approve as final expenditure to recoup previous Trustee Council investment in this project. Will only ID chum and sockeye.			
94139	Salmon Instream Habitat and	PWS, Ken, Kod	G			$572.6	Y	1	5	3	1	0	17	1					$755.3
USFS	Stock Restoration						$6.0								If the Trustees wish to engage in enhancement of fish runs through habitat alteration, this is probably the best project to do it. No recommendation.	No implementation prior to full NEPA compliance. Combine with project # 94043 (Cutthroat and Dolly Restoration) and approve with two years funding. Subject to NEPA compliance (EA's) and review of benefit/cost analyses.			
94147	Comprehensive Monitoring Program	Spill area		M		$0.0	N						6	1					$0.0
NOAA						Withdrawn by NOAA	$0.0								Could provide overall umbrella for coordination of resource monitoring. New executive director will be identifying a strategy for implementation of the Restoration Plan and something like this may be valuable in that effort. To be considered later.	Withdrawn by agency. Will be integrated into management implementation structure. Monitoring program guidance will be developed under direction of Chief Scientist and peer reviewers.			
94159	Marine Bird & Sea Otter Boat Surveys	PWS		M		$179.2	N	0	3	5	3	0	4	1					$0.0
DOI-FWS						Amount Approved in 1993 Court Request: $107	$0.0								Investigators need to be more responsive to peer review comments on earlier report. Hold for later possible approval pending acceptance of '89-'91 final report.	Spring survey already approved. Disapprove summer surveys pending review of survey frequency needs.			
94163	Forage Fish Influence on	PWS		M		$606.6	N	4	6	2	1	0	14	1					$606.6
NOAA	Injured Species						$0.0								Very little is known about forage fish populations in the spill area. This project will begin to evaluate this resource that appears to be the key for the recovery of main bird and mammal species injured in the spill. Highly recommended. Approve funding.	Approve. Integrate with projects 94320 (PWS System Investigation), 94102 (Murrelet Prey), and 94173 (Pigeon Guillemot).			

[Y=Yes, NEPA compliance required (either an EA or EIS needed) N=No EA or EIS needed (project eligible for categorical exclusion)]

[Note: Public comment figures are only for those written comments received prior to the Trustee Council meeting January 31, 1994]

[LOCATION: PWS=Prince William Sound, KEN=Kenai, KOD=Kodiak, AKP=Alaska Pen][COST: Federal Fiscal Year 1994] [PAG: H=High, M=Medium, L=Low, N=No, A=Abstain] [CATEGORY: G=General, M=Monitoring, H=Habitat]

																Trustee Council	FFY94
							Y/N	H	M	L	N	A	Support	Oppose	Recommendation	Actio	($000's)
94165	Herring Genetic Stock Identification	PWS		M		$62.2	N			2	0	0	10	1			$62.2
ADF&G	in Prince William Sound						$0.0								Completion and acceptance of final report from herring damage assessment is necessary before funding project. Hold for later possible approval pending acceptance of '89-'91 final report.	Approve contingent up Scientist/peer review acceptance of damage assessment studies.	
94166	Herring Spawn Deposition and	PWS	G			$0.0	N						9	1			$0.0
ADF&G	Reproductive Impairment					Amount Approved in 1993 Court Request: $466.3	$0.0								Completion and acceptance of final report from herring damage assessment is necessary before project is funded. Hold for later possible approval pending acceptance of '89-'91 final report.	Already funded.	
94173	Pigeon Guillemot Recovery Monitoring	PWS		M		$201.1	N	1	2	7	1	0	3	1			$201.1
DOI-FWS	DRAFT						$0.0								Species in long-term decline. Colony counts probably only needed done every several years. Other activities on feeding could go forward if closely linked with forage fish study. Hold for possible later funding.	Approve contingent on reduction in scope and integration with projects 94163 (Forage Fish) and 94102 (Murrelet Prey) and elimination of overlapping costs.	
94184	Coded Wire Tag Recoveries from Pinks	PWS	G			$196.6	N	6	2	2	0	0	13	1			$0.0
ADF&G	in Prince William Sound					Amount Approved in 1993 Court Request: $47.8	$0.0								Comprehensive review of pink salmon research needed in PWS with relationship to Trustee goals for restoration, and clear picture of integration with normal agency activities. Hold for later possible approval pending review.	Integrate with 94320 (PWS System Investigation).	
94185	Coded Wire Tagging of Wild Pinks for	PWS	G			$251.2	N	3	2	5	0	0	12	1			$0.0
ADF&G	Stock Identification					Amount Approved in 1993 Court Request: $34.8	$0.0								See comments for 94184.	Integrate with 94320 (PWS System Investigation).	
94187	Otolith Marking - Inseason Stock	PWS	G			$179.7	N	7	1	2	0	0	12	2			$0.0
ADF&G	Separation						$0.0								See comments for 94184.	Integrate with 94320 (PWS System Investigation).	
							[Y=Yes, NEPA compliance required (either an EA or EIS needed) N=No EA or EIS needed (project eligible for categorical exclusion)]										
							[Note: Public comment figures are only for those written comments received prior to the Trustee Council meeting January 31, 1994]										

[LOCATION: PWS=Prince William Sound, KEN=Kenai, KOD=Kodiak, AkP=Alaska Pen][COST: Federal Fiscal Year 1994] [PAG: H=High, M=Medium, L=Low, N=No, A=Abstain] [CATEGORY: G=General, M=Monitoring, H=Habitat]

Agency	Project Title	Location	Category G	Category M	Category H	Cost FFY 94	NEPA Y/N	Public Advisory Group			Public Comment		Chief Scientist's Recommendation	Trustee C Actio	FFY94 ($000's)
									L	N	A	Support	Oppose			
94189	Pink Salmon Stock Genetics in PWS	PWS		M		$171.2	N		2	1	0	13	2			$0.0
ADF&G							$0.0							See comments for 94184.	Integrate with 94320 (PWS System Investigation).	
94191	Oil Related Egg & Alevin Mortalities	PWS		M		$415.4	N	6	0	3	1	0	12	1		$415.4
ADF&G						Amount Approved in 1993 Court Request: $367.5	$0.0							In the last year important heritable differences in egg mortality have been found between oiled and unoiled streams in PWS Highly recommended. Approve.	Approve.	
94192	Evaluation of Hatchery Straying on	PWS	G			$640.5	N	1	5	3	1	0	11	1		$0.0
ADF&G	Wild Pinks in PWS						$0.0							See comments for 94184.	Integrate with 94320 (PWS System Investigation).	
94200	Public Land Access 17(b) Easement ID	PWS, Ken, Kod			H	$38.1	N	6	7	0	0	0	8	1		$0.0
ADNR							$0.0							Would compile atlas showing legal public access. No recommendation.	Disapprove. Federal concerns about use of civil settlement for project. Recommend that Trustees have ADNR coordinate with the federal agencies on the development of a recreation plan for the spill area and expenditure of state criminal funds.	
94216	Gulf of Alaska Recreation	Kod, Ken, AkP	G			$164.6	N	3	3	1	3	0	7	1		$0.0
DOI-NPS	Plan Development						$0.0							This will describe injury, identify goals for restoration and develop projects for outside PWS. No recommendation.	Disapprove. Federal concerns about use of civil settlement for project. Recommend that Trustees have ADNR coordinate with the federal agencies on the development of a recreation plan for the spill area and expenditure of state criminal funds.	
							[Y=Yes, NEPA compliance required (either an EA or EIS needed) N=No EA or EIS needed (project eligible for categorical exclusion)]								
							[Note: Public comment figures are only for those written comments received prior to the Trustee Council meeting January 31, 1994]								

[LOCATION: PWS=Prince William Sound, KEN=Kenai, KDD=Kodiak, AkP=Alaska Pen][COST: Federal Fiscal Year 1994] [PAG: H=High, M=Medium, L=Low, N=No, A=Abstain] [CATEGORY: G=General, M=Monitoring, H=Habitat]

	Project Title	Location	G	M	H	FFY 94	Y/N	H	M	L	N	A	Support	Oppose	Trustee Council Recommendation	Trustee Council Action	FFY94 ($000's)
94217	PWS Area Recreation	PWS	G			$14.9	N						7	1			$0.0
USFS	Implementation Plan					Amount Approved in 1993 Court Request: $76.3	$0.0								This develops recreation projects inside PWS. No recommendation.	No further funding requi agencies.	
94237	River Otter Recovery Monitoring	PWS		M		$156.7	N	1	0	5	3	1	3	1			$0.0
ADF&G							$0.0								There is controversy over the interpretation of the damage to this species. The investigators have been encouraged to present a more balanced discussion of their data. Disapprove.	Disapprove.	
94241	Rockfish Management Plan	PWS, Kenai		M		$233.2	N	0	3	5	2	0	6	2			$0.0
ADF&G	Data Development						$0.0								This is an enhancement action since injury to this species is not certain. There was increased fishing pressure on this species after the spill. Review normal agency management obligations.	Disapprove. Review as part of the 1995 Work Plan. Questions regarding normal agency responsibility. DOL has concern about extent of injury.	
94244	Seal and Otter Cooperative	PWS, Kenai	G			$54.5	N	0	3	2	5	0	4	1			$54.5
ADF&G	Subsistence Harvest Assistance						$0.0								Not clear why the summary information on these resources, which is available, can not be conveyed to subsistence users for less cost. Evaluate costs for this project.	Approve. Recommend that Council staff work with DCRA and subsistence users to examine opportunities to fund community-based implementation of this project with criminal funds.	
94246	Sea Otter Recovery Monitoring	PWS		M		$211.3	N	1	3	5	2	0	3	1			$0.0
DOI-FWS						Amount Approved in 1993 Court Request: $207.4	$0.0								Claims for injury from '93 studies based on serum chemistry not yet reviewed. Publication record of sea otter biologists could improve considering the total amount of funding provided in past. Skip '94 to provide chance to analyze and complete past work.	Defer additional funding pending synthesis of existing data. Review for consideration as part of 1995 Work Plan. Disparity in boat and aerial survey results needs to be resolved.	
94255	Kenai River Sockeye	Kenai	G			$285.1	N	4	2	3	1	0	16	1			$285.1
ADF&G	Salmon Restoration					Amount Approved in 1993 Court Request: $121.0	$0.0								Includes genetic characterization of Kenai River fish in UCI mixed stock fishery. Suggest continuation, but normal agency management obligations should be reviewed.	Approve.	
							[Y=Yes, NEPA compliance required (either an EA or EIS needed) N=No EA or EIS needed (project eligible for categorical exclusion)]										
							[Note: Public comment figures are only for those written comments received prior to the Trustee Council meeting January 31, 1994]										

[LOCATION: PWS=Prince William Sound, KEN=Kenai, KOD=Kodiak, AkP=Alaska Pen][COST: Federal Fiscal Year 1994] [PAG: H=High, M=Medium, L=Low, N=No, A=Abstain] [CATEGORY: G=General, M=Monitoring, H=Habitat]

	Project Title	Location	G	M	H	FFY 94	Y/N	H	M	L	N	A	Support	Oppose	Chief Scientist's Recommendation	Trustee Council Actic	FFY94 ($000's)
94258	Sockeye Salmon Overescapement	Ken, Kod		M		$475.9	N			4	1	0	18	1			$475.9
ADF&G						Amount Approved in 1993 Court Request: $379.0	$0.0								Program was favorably reviewed in '93. '94 run forecasts less gloomy than previous. Fund. Highly recommended	Approve.	
94259	Coghill Lake Sockeye	PWS	G			$247.5	Y	1	3	5	1	0	16	1			$247.5
ADF&G	Salmon Restoration					Amount Approved in 1993 Court Request: $76.6	$0 EA done.								This is an enhancement action. Project was not peer reviewed in '93. No recommendation.	Approve. Coordinate with 94320 (PWS System Investigation) to obtain project smolts.	
94266	Shoreline Assessment & Oil Removal	PWS, Kenai	G			$940.2	Y	8	2	1	2	0	9	1			$365.0
ADEC	DRAFT					Amount Approved in 1993 Court Request: $33.1	$5.0								It is not necessary to do this survey every year. It was done thoroughly in '93. Consideration should be given to either a scaled-down version of this project in 94, skipping a year, and/or combining with other intertidal work.	No implementation prior to full NEPA compliance. Project is limited to beach rehabilitation in PWS and site assessment on Alaska Peninsula. Coordinate with project # 94090 (Oiled Mussel Bed Restoration) for additional cost savings	
94272	Chenega Chinook Release Program	PWS	G			$57.4	Y	5	4	0	0	1	5	1			$57.4
ADF&G							$0.0								Trustees approved the concept last year. Implement.	Approve. Recommend that Council staff work with DCRA and subsistence users to examine opportunities to fund community-based implementation of this project with criminal funds.	
94279	Subsistence Food Safety Testing	PWS, Ken, Kod	G			$268.3	N	5	3	1	1	0	4	1			$268.3
ADF&G						Amount Approved in 1993 Court Request: $110.9	$0.0								If the chemical analyses reported in the past did not satisfy subsistence users, this approach not likely to be successful. Thought that '93 was to be the last year. Consider only funding information distribution of project.	Approve. Recommend that Council staff work with DCRA and subsistence users to examine opportunities to fund community-based implementation of this project with criminal funds.	
94280	Spot Shrimp Survey and	PWS		M		$232.2	N	2	4	3	1	0	7	1			$0.0
ADF&G	Juvenile Shrimp Habitat ID						$0.0								No evidence of damage to this species. Disapprove.	Defer. Questions raised about adequate demonstration of injury. Consider as part of an ecosystem management approach (as part of 1995 Work Plan).	
							[Y=Yes, NEPA compliance required (either an EA or EIS needed) N=No EA or EIS needed (project eligible for categorical exclusion)]										
							[Note: Public comment figures are only for those written comments received prior to the Trustee Council meeting January 31, 1994]										

[LOCATION: PWS=Prince William Sound, KEN=Kenai, KOD=Kodiak, AKP=Alaska Pen][COST: Federal Fiscal Year 1994] [PAG: H=High, M=Medium, L=Low, N=No, A=Abstain] [CATEGORY: G=General, M=Monitoring, H=Habitat]

Agency	Project Title	Location	G	M	H	FFY 94	Y/N	L	N	A	Support	Oppose	Chief Scientist's Recommendation	Trustee Council Action	FFY94 ($000's)
94285	Subtidal Sediment Recovery Monitoring	Ken,Kod,AkP		M		$178.0	N	5	3	0					$178.0
NOAA						Amount Approved in 1993 Court Request: $451.2	$0.0						Subtidal sediments in the Gulf have not been surveyed since 1990; this program will provide new information on their recovery.	Approve contingent up Scientist/peer review approval of reports from prior years.	
94290	Hydrocarbon Data Analysis	Spill area		M		$55.5	N	10	1	0	1	1	4	2			$55.5
NOAA	and Interpretation					Amount Approved in 1993 Court Request: $74.7	$0.0						This is essential to proper interpretation of study results as long as hydrocarbon data need to be interpreted Highly recommended.	Approve.	
94316	Shoreline trash Cleanup	PWS	G			$38.6	N	1	7	3	2	0	8	1			$0.0
ADNR							$0.0						Uncertain how much litter was a result of spill. Disapprove.	Disapprove. Federal concerns about use of civil settlement for project. Recommend that Trustees have ADNR coordinate with the federal agencies on the development of a recreation plan for the spill area and expenditure of state criminal funds.	
94320	PWS System Investigation	PWS		M		$4,900.0	N	7	2	1	0	0	17	1			$6,250.0
ADF&G						Amount Approved in 1993 Court Request: $100.0	$0.0						Approve in concept the core scientific studies of oceanographic control of zooplankton abundance and prey switching by fish supported by reviewers and require OK of detailed study plans before release of funds. Implement study gradually.	Approve conditionally (see Trustee Council minutes) and subject to successful integration of this project with project #'s 94163, 94184, 94185, 94187, 94189, 94192, 94259 and those portions of project # 94421 that involve research.	
94345	Salmon Spawning Escapement on the	Kenai	G			$219.2	N	2	3	3	2	0	17	2			$0.0
ADF&G	Lower Kenai River						$0.0						It is unlikely that the proposed methods of estimating a lingering effect of the spill on the salmon runs in the Lower Kenai River will be successful. Disapprove.	Disapprove. Funds should be invested in projects that have a higher probability of restoring fisheries resources.	
94386	Artifact Repositories -	Spill area	G			$243.3	N	1	2	6	2	1	5	1			$0.0
ADNR	Planning and Design						$0.0						No recommendation.	Approve. Combine with project # 94007 (Site Specific Archeological Restoration).	
							[Y=Yes, NEPA compliance required (either an EA or EIS needed) N=No EA or EIS needed (project eligible for categorical exclusion)]								
							[Note: Public comment figures are only for those written comments received prior to the Trustee Council meeting January 31, 1994]								

[LOCATION: PWS=Prince William Sound, KEN=Kenai, KOD=Kodiak, AkP=Alaska Pen][COST: Federal Fiscal Year 1994] [PAG: H=High, M=Medium, L=Low, N=No, A=Abstain] [CATEGORY: G=General, M=Monitoring, H=Habitat]

	Project Title	Location	G	M	H	FFY 94	Y/N	H	M	L	N	A	Support	Oppose	Recommendation	Trustee Council Action	FFY 94 ($000's)
94417	Waste Oil Disposal Facilities	Spill area	G			$232.2	Y			2	1	0	6	1			$232.2
ADEC							$0.0								Connection to spill is tenuous. Disapprove.No implementation prior to full NEPA compliance.	No implementation prio IEPA compliance. Approve with understanding that future operating and maintenance cost will be assumed by communities and a full report on the project results will be given to the Trustee Council before further funding.	
94419	Leave No Trace Educational Program	PWS	G			$167.7	N	1	2	9	0	0	8	1			$0.0
USFS							$0.0								Addresses loss of public recreational use of spill area. No comment.	Disapprove. Federal concerns about use of civil settlement for project. Recommend that Trustees have ADNR coordinate with the federal agencies on the development of a recreation plan for the spill area and expenditure of state criminal funds.	
94420	Recreation Information Center	PWS, Ken	G			$100.8	N	1	4	3	4	1	4	2			$0.0
USFS	at Portage						$0.0								No recommendation.	Disapprove. Federal concerns about use of civil settlement for project. Recommend that Trustees have ADNR coordinate with the federal agencies on the development of a recreation plan for the spill area and expenditure of state criminal funds.	
94421	Common Property Salmon	PWS, Ken	G			$5,336.8	N	5	2	2	0	1	68	4			$0.0
ADF&G	Stock Restoration						$0.0								Delay pending review of benefits of understanding relationships of fry survival to marine conditions and contributing to proposed PWS ecosystem study versus risks that hatcheries may contribute to declines of wild stock salmon or other resources.	Executive Director will work with State and Federal representatives to develop an integrated funding strategy for the one year requested.	
94422	Environmental Impact Statement for	Spill area		M		$323.5	Y										$343.4
USFS	the Restoration Plan						$0.0									Approve. Total project cost for FFY 94 and FFY 95 is $343.4. FFY 94 cost is $323.5.	
94425	Marine Mammal Book	Spill area		M		$0.0	N										$20.0
NOAA							$0.0									Approve. Will make publication more widely available to the public.	
94504	Genetic Stock ID of Kenai River	Kenai	G			$0.0	N	5	2	2	1	0	14	1			$0.0
ADF&G	Sockeye					Amount Approved in 1993 Court Request: $262.2	$0.0								This is the closeout of a 1993 project. Costs appear high. Examine costs before approval.	Already approved.	

[Y=Yes, NEPA compliance required (either an EA or EIS needed) N=No EA or EIS needed (project eligible for categorical exclusion)]

[Note: Public comment figures are only for those written comments received prior to the Trustee Council meeting January 31, 1994]

[LOCATION: PWS=Prince William Sound, KEN=Kenai, KOD=Kodiak, AKP=Alaska Pen][COST: Federal Fiscal Year 1994] [PAG: H=High, M=Medium, L=Low, N=No, A=Abstain] [CATEGORY: G=General, M=Monitoring, H=Habitat]

Project# / Agency	Project Title	Location	Category G	Category M	Category H	Cost FFY 94	NEPA Y/N	Pub... H	...ory Group N	...ory Group A	Public Comment Support	Public Comment Oppose	Chief Scientist's Recommendation	Trustee Council Action	FFY94 ($000's)
14505	Information Needs for	Spill area			H	$0.0	N	0	0	0	8	1			$0.0
ISFS	Habitat Protection					Amount Approved in 1993 Court Request: $406.1	$0.0						This is a closeout of a 1993 project. Costs appear very high for closeout. Examine cost before approval.	Already approved. No further funding required.	
94506	Pigeon Guillemot Recovery	PWS		M		$0.0	N	9	2	0	0	0	4	0			$0.0
DOI-FWS						Amount Approved in 1993 Court Request: $13.9	$0.0							Closeout costs appear to be reasonable. Approve.	Already approved.	
94507	Symposium Proceedings Publication	Spill area		M		$0.0	N										$0.0
NOAA	DRAFT					Amount Approved in 1993 Court Request: $69	$0.0								Already approved.	
		Proposed 1/31/94 Project Budget Subtotal:				$24,204.1									Approved Project Budget Subtotal:	$14,379.1
		Already funded 11/30/93 Project Budget Subtotal:				$5,007.9									Already funded 11/30/93 Project Budget Subtotal:	$5,007.9
		Proposed FFY 94 Projects - NEPA Costs:				$26.5									Approved NEPA Compliance Budget:	$19.5
		Proposed FFY 94 Project Budget Total: $29,238.5													**Approved FFY 94 Project Budget Total: $19,406.5**	
94199	Institute of Marine Science -	Spill area		M		$24,984.0	Y				356	17				$24,984.0
ADF&G	Seward Improvements					EVOS-related funds (includes NEPA costs)	$0.0						Would provide a center for coordination of long-term monitoring and research on injured species in the spill area, housing of reports and information from Trustee-sponsored projects. Highly recommended.	Approve subject to successful completion of tasks. Project funding level recommendation to be developed by Executive Director for further consideration by Trustee Council. See Attachment C.	*Estimate only. Up to $50.0 authorized for initial work.
															Institute of Marine Science / Seward - Estimate Subtotal:	**$24,984.0**
94424	Restoration Reserve	Spill area		M			N									$12,000.0
ADOL							$0.0							Approve. Will provide funding needed to undertake long-term restoration activities.		
															Approved Restoration Reserve Subtotal:	**$12,000.0**

[LOCATION: PWS=Prince William Sound, KEN=Kenai, KOD=Kodiak, AKP=Alaska Pen][COST: Federal Fiscal Year 1994] [PAG: H=High, M=Medium, L=Low, N=No, A=Abstain] [CATEGORY: G=General, M=Monitoring, H=Habitat]

DRAFT

ATTACHMENT B

1. Habitat Protection needs to move forward as part of an overall restoration strategy.
2. The Executive Director shall work with lead negotiators to develop a standardized appraisal process, including standardized appraisal instructions, which shall be used to appraise the parcels under consideration.
3. The Executive Director shall start negotiations with the landowners of the parcels ranked high in the Comprehensive Large Parcel Evaluation and Ranking. The Executive Director may include additional large parcels as necessary to facilitate development of the list in step 6. These negotiations are to be conducted for the purpose of providing the Trustee Council with proposed terms and conditions for acquisition. Agreement to proposed terms and conditions are discretionary with the Trustee Council. No promises or representations to the landowners to the contrary shall be made.
4. The Executive Director shall review the Comprehensive Large Parcel Evaluation and Ranking based on public comment and Public Advisory Group comment. The document shall also be reviewed to take into account our understanding of where injury actually occurred and the benefits to accrue to the populations actually injured.
5. The Executive Director will develop a rationale for acquisition for each parcel under consideration.
6. Based upon all of the information developed above, the Executive Director will provide the Trustee Council with a recommended list of large parcels to be protected. The recommendation will include considerations such as: 1) the degree of benefit afforded injured resources and services, 2) the need to have a balanced program throughout the spill area, 3) the cost and terms available from the landowner for individual parcels, 4) the adequacy of protection measures available from the landowner, and 5) the adequacy of funds to carry out other restoration activities.
7. Small parcel negotiations will proceed once an evaluation and ranking of small parcels has been completed and approved by the Trustee Council.

ATTACHMENT B

1. Habitat Protection needs to move forward as part of an overall restoration strategy.
2. The Executive Director shall work with lead negotiators to develop a standardized appraisal process, including standardized appraisal instructions, which shall be used to appraise the parcels under consideration.
3. The Executive Director shall start negotiations with the landowners of the parcels ranked high in the Comprehensive Large Parcel Evaluation and Ranking. The Executive Director may include additional large parcels as necessary to facilitate development of the list in step 6. These negotiations are to be conducted for the purpose of providing the Trustee Council with proposed terms and conditions for acquisition. Agreement to proposed terms and conditions are discretionary with the Trustee Council. No promises or representations to the landowners to the contrary shall be made.
4. The Executive Director shall review the Comprehensive Large Parcel Evaluation and Ranking based on public comment and Public Advisory Group comment. The document shall also be reviewed to take into account our understanding of where injury actually occurred and the benefits to accrue to the populations actually injured.
5. The Executive Director will develop a rationale for acquisition for each parcel under consideration.
6. Based upon all of the information developed above, the Executive Director will provide the Trustee Council with a recommended list of large parcels to be protected. The recommendation will include considerations such as: 1) the degree of benefit afforded injured resources and services, 2) the need to have a balanced program throughout the spill area, 3) the cost and terms available from the landowner for individual parcels, 4) the adequacy of protection measures available from the landowner, and 5) the adequacy of funds to carry out other restoration activities.
7. Small parcel negotiations will proceed once an evaluation and ranking of small parcels has been completed and approved by the Trustee Council.

DRAFT

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 "G" Street, Anchorage, AK 99501
Phone: (907) 278-8012 Fax: (907) 276-7178

TO: Agency Liaisons:
Mark Brodersen
Tony DeGange (for Sandy R.)
Dave Gibbons
Veronica Gilbert
Jerome Montague

DATE: March 16, 1994

TELE: 278-8012
FAX: 276-7178

FROM: Byron Morris
Bob Loeffler

SUBJECT: Recovery Monitoring

The Trustee Council agencies have been asked to develop a recovery monitoring program as part of an appendix to the *Draft Restoration Plan.* The information will be used to guide development of recovery monitoring projects in the 1995 and future Work Plans. A recovery monitoring program includes the Status of Recovery, Recovery Objectives (that defines what conditions we are trying to achieve), Recovery Monitoring Strategies to achieve the objective, and a schedule of when the monitoring strategies will be conducted.

Chapter 4 of the *Draft Restoration Plan* provides some of the needed information. For each resource and service, the plan provides the Status of Recovery, Recovery Objectives, and a very general monitoring strategy for each resource. We are asking the agencies to provide further detail and rationale concerning the monitoring strategy and schedule. (A partially completed recovery program for sea otters is enclosed to illustrate the format.)

Please note that we are *not* asking for general research needs, only for a conservative estimate of recovery monitoring needs. For example, for resources that are recovering, we expect only the recovery monitoring needed to "track the progress of recovery and detect major reversals" (*Draft Restoration Plan*, Chapter 4, p 26).

In today's teleconference meeting, we assigned a lead agency (or sometimes joint responsibility) for each resource or service. Some resources or services may not require further recovery monitoring. In these cases, the agency should note that no further monitoring is needed.

To make the task easier, we have extracted the relevant information from the *Draft Restoration Plan* for each resource and service. A paper copy is attached. An electronic copy (WordPerfect 5.1) is available from the Simpson Building network as H:\home\recovery\forms.wp5 or by calling Bob Loeffler at 278-8012.

Schedule

1. Using the attached form, the lead agency for a resource or service prepares the needed information. Agency liaisons return the completed forms to Byron Morris (electronic and paper copy) by 4/1/94.

2. Byron will distribute the completed forms to the Restoration Work Force and Chief Scientists for a review meeting/teleconference on 4/7/94 (9:00 A.M.).

3. Following the review meeting, the Chief Scientists will distribute the forms for Peer Review. Peer reviewers will discuss recommendations with agency liaisons as appropriate and will provide written recommendations to the Chief Scientist by 4/20/94.

4. Byron Morris will distribute the revised forms for a Work Force/Implementation Management Structure Group for final review and approval. The meeting will be on 4/29/94.

Once finalized, the information will become part of an appendix to the *Draft Restoration Plan* and will be circulated for public review. Projects that implement Recovery Monitoring Strategies scheduled for 1995 will become part of the Draft 1995 Work Plan.

[**NOTE TO REVIEWERS:** The Recovery Monitoring Strategy, Estimated Recovery Time, and Monitoring Schedule are made-up in this example to show the types of things that would be written. The Recovery Objective and Recovery Status are taken from the *Draft Restoration Plan.*]

Injured Resource: Sea Otter

Recovery Status: Sea otters do not appear to be recovering, but are expected to eventually recover to their prespill population. Exactly what population increases would constitute recovery is very uncertain, as there is no population data from 1986 to 1989, and the population may have been increasing in Eastern Prince William Sound during that time. In addition, only large changes in the population can be reliably detected with current measuring techniques. However, there are recent indications that the patterns of juvenile and mid-aged mortalities are returning to prespill conditions.

Recovery Objective: Sea otters will be considered recovered when population abundance and distribution are comparable to prespill abundance and distribution, and when all ages appear healthy.

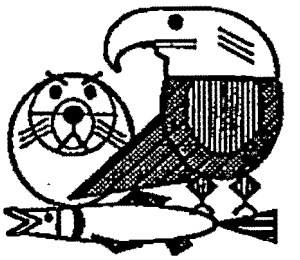
Recovery Monitoring Strategy: Techniques to measure sea otter abundance and distribution typically include boat or aerial surveys. In the past, scientists have used the age-distribution of sea otter carcasses found on beaches to indicate whether some age classes are unhealthy. These are expected to be the methods used in the future.

Monitoring Schedule. Population and carcass surveys will be conducted approximately every two years because....[Provide rationale here]...

Estimated Recovery Time: Unknown

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 "G" Street, Anchorage, AK 99501
Phone: (907) 278-8012 Fax: (907) 276-7178



March 3, 1994

Meeting Notes
January 13 & 14, 1994 Work Session
on
Ecosystem-based Management Structure

In January, we distributed draft notes and asked for review and suggestions. These revised notes include changes based on the suggestions we received. Some of the most important changes are: the Guiding Principles are grouped into categories for better communication and understanding, ecosystem definitions are provided for the three ecosystem types, and background information is provided that puts the goals and objectives into perspective.

ATTACHMENT 1

MISSION STATEMENT

The mission of the Trustee Council and all participants in Council efforts is to efficiently restore the environment injured by the *Exxon Valdez* oil spill to a healthy, productive, world renown ecosystem, while taking into account the importance of the quality of life and the need for viable opportunities to establish and sustain a reasonable standard of living.

The restoration will be accomplished through the development and implementation of a comprehensive, interdisciplinary recovery and rehabilitation program that includes:

- Natural Recovery
- Monitoring and Research
- Resource and Service Restoration
- Habitat Acquisition and Protection
- Resource and Service Enhancement
- Replacement
- Meaningful Public Participation
- Project Evaluation
- Fiscal Accountability
- Efficient Administration

— adopted by the *Exxon Valdez* Oil Spill Trustee Council November 30, 1993

ATTACHMENT 2

GOAL

A mental concept of what you want.

OBJECTIVE

Pertaining to a material or measurable specific object (as distinguished from a mental concept).

STRATEGY

Activity or expenditure that is directed toward accomplishment of an objective (i.e., who, what, where, when, how).

CATEGORY OF RESTORATION STRATEGY

- Monitoring and Research
- Habitat Protection
- General Restoration

STRATEGY TIMELINE AND COSTS

ATTACHMENT 3

GUIDING PRINCIPLES

General Principles

1. Restoration should contribute to a healthy, productive and biologically diverse ecosystem within the spill area that supports the services necessary for the people who live in the area.

2. Restoration will take an ecosystem approach to better understand what factors control the populations of injured resources.

Principles that Focus or Direct Restoration Activities

3. Restoration will focus upon injured resources and services and will emphasize resources and services that have not recovered. Resources and services will be enhanced, as appropriate, to promote restoration. Restoration actions may address resources for which there was no documented injury if these activities will benefit an injured resource or service.

4. Resources and services not previously identified as injured may be considered for restoration if reasonable scientific or local knowledge obtained since the spill indicates a spill-related injury.

5. Projects designed to restore or enhance an injured service:
   - must have a sufficient relationship to an injured resource,
   - must benefit the same user group that was injured, and
   - should be compatible with the character and public uses of the area.

6. Restoration activities will occur primarily within the spill area. Limited restoration activities outside the spill area, but within Alaska, may be considered under the following conditions:
   - when the most effective restoration actions for an injured population are in a part of its range outside the spill area, or
   - when the information acquired from research and monitoring activities outside the spill area will be significant for restoration or understanding injuries within the spill area.

Principles Concerning Integration of Restoration Activities

7. Restoration will include a synthesis of findings and results, and will also provide an indication of important remaining issues or gaps in knowledge.

8. Restoration shall take advantage of cost sharing opportunities where effective.

9. Restoration should be guided and reevaluated as information is obtained from damage assessment studies and restoration actions.

Public Participation Principles

10. Restoration must include a meaningful public participation process at all levels — planning, project design, implementation and review.

11. Restoration must reflect public ownership of the process by timely release and reasonable access to information and data.

Principles concerning the Design of Restoration Projects

12. Proposed restoration strategies should state a clear, measurable and achievable end point.

13. Restoration must be conducted as efficiently as possible, reflecting a reasonable balance between costs and benefits.

Principles to Help Establish Priorities for Restoration Activities

14. Priority will be given to restoring injured resources and services which have economic, cultural and subsistence value to people living in the oil spill area, as long as this is consistent with other principles.

15. Possible negative effects on resources or services must be assessed in considering restoration projects.

16. Priority shall be given to strategies that involve multi-disciplinary, interagency or collaborative partnerships.

17. Restoration projects will be subject to open, independent scientific review before Trustee Council approval.

18. Past performance of the project team should be taken into consideration when making funding decisions on future restoration projects.

19. Competitive proposals for restoration projects will be encouraged.

20. Government agencies will be funded only for restoration projects that they would not have conducted had the spill not occurred.

These Guiding Principles reflect and elaborate on the Policies identified in Chapter 2 of the Draft *Exxon Valdez* Oil Spill Restoration Plan (November 1993). Further guidance regarding the categories of restoration action — General Restoration, Habitat Protection and Acquisition, Monitoring and Research, and Public Information and Administration — are provided in Chapter 3 of the Draft *Exxon Valdez* Oil Spill Restoration Plan (November 1993).

Attachment 4

This attachment organizes information on injuries and restoration according to general ecosystem types within the spill area, identifies resources and services injured by the spill, and provides a statement of goals and objectives for those resources and services.

Resources and services injured by the spill. The list of injured resources and services is taken from Appendix B of the Draft *Exxon Valdez* Oil Spill Restoration Plan (November 1993). As a result of the January 13-14 work session, the information was modified by subdividing some resource categories:

- "mussels" was made its own category rather than being included in "intertidal organisms," and
- "intertidal ecosystem" and "subtidal ecosystem" were subdivided into "organisms" and "sediments."

In order to make the ecosystem context more apparent, each resource and service is shown according to where it exists in the ecosystem: pelagic (offshore), near-shore, or upland ecosystem.

Goals. Draft goals are provided for each of the three parts of the ecosystem.

Objectives. Objectives are statements that pertain to a measurable, specific object (as distinguished from a mental concept). They are given for each injured resource and service, and are taken from definitions of recovery in Chapter 4 of the Draft Restoration Plan.

Ecosystem Definitions. The three ecosystem types described below are not intended to have hard-and-fast, legally definable boundaries. Rather, they are intended to describe areas that generally contain similar biological and physical features that influence the relationships of the resources that exist there and the services they support.

Pelagic Ecosystem. The deeper, open water region offshore that is not directly affected by wave action, terrestrial runoff, or other near-shore processes. Examples are the center of Prince William Sound and a few hundred yards beyond the steep cliffs and fiord mouths of the outer Kenai coast.

Near-shore Ecosystem. Terrestrial and aquatic areas dominated by near-shore processes such as tidal movement, salt spray, intertidal and shoreline vegetation, wave action, and terrestrial runoff. Near-shore areas include the intertidal zone, salt marshes, and beach areas where salt and shoreline processes dominate, as well as shallower offshore waters that are greatly influenced by near-shore processes. It also includes narrow fjords and channels that occur in the spill area.

Upland Ecosystem. The area of land and water uphill of the near-shore ecosystem.

INJURED RESOURCE — ECOSYSTEM MATRIX

	ECOSYSTEM		
	Pelagic (Off-shore)	Near-shore	Upland
Harbor seal	X	X	
Sea otter		X	
Killer whale	X		
Sockeye salmon	X	X	X
Cutthroat trout		X	X
Dolly Varden		X	X
Rockfish	X	X	
Pacific herring	X	X	
Pink salmon	X	X	X
Common murre	X	X	
Harlequin duck		X	X
Marbled murrelet	X	X	X
Pigeon guillemot		X	
Bald eagle		X	X
Black oystercatcher		X	X
River otter		X	X
Clams		X	
Mussels		X	
Intertidal organisms		X	
Subtidal organisms	X	X	
Sediments	X	X	
Other Resources			
Archeological Resources		X	X
Designated Wilderness		X	X

ATTACHMENT 4 (continued)

INJURED RESOURCES

Pelagic (Off-shore) Ecosystem

Sockeye salmon
Pink salmon
Pacific herring
Rockfish
Killer whale
Harbor seal

Common murre
Marbled murrelet

Subtidal organisms
Sediments

Near-shore Ecosystem

Sockeye salmon
Pink salmon
Cutthroat trout
Dolly Varden
Pacific herring
Harbor seal
Sea otter
Clams
Mussels
Pigeon guillemot
Rockfish

Archaeologic resources

Bald eagle
Harlequin duck
Black oystercatcher
River otter
Intertidal organisms

Subtidal organisms

Marbled murrelet
Sediments
Common murre

Designated wilderness areas

Upland Ecosystem

Sockeye salmon
Pink salmon
Cutthroat trout
Dolly Varden

River otter

Harlequin duck
Marbled murrelet

Bald eagle
Black oystercatcher

Archeological resources

Designated wilderness areas

LOST OR REDUCED SERVICES

Commercial fishing
Recreation/Tourism

Passive uses
Subsistence

GOALS

Pelagic (Off-shore) Ecosystem: A heathy, productive, pelagic (off-shore) ecosystem that supports resources and services injured by the oil spill, and that maintains naturally occurring biodiversity.

Near-shore Ecosystem: A heathy, productive, near-shore ecosystem that supports resources and services injured by the oil spill, and that maintains naturally occurring biodiversity.

Upland Ecosystem: A heathy, productive, upland ecosystem that supports resources and services injured by the oil spill, and that maintains naturally occurring biodiversity.

OBJECTIVES

(In the table below, the first column shows the ecosystem to which the objective applies: P=pelagic (off-shore) ecosystem, N=near-shore ecosystem, and U=upland ecosystem.)

The overall goal of restoration is recovery of all injured resources and services. Ecosystem goals are described above. This section defines objectives as measures of recovery to meet the overall restoration goal and ecosystem goals. For some resources, little is known about the extent of injury and recovery, so it is difficult to define recovery or develop restoration strategies.

In general, resources and services will have recovered when they return to conditions that would have existed had the spill not occurred. Because it is difficult to predict conditions that would have existed in the absence of the spill, recovery is often defined as a return to prespill conditions. For resources that were in decline before the spill, like marbled murrelets, recovery may consist of stabilizing the population at a lower level than before the spill.

Where little prespill data exists, injury is inferred from comparison of oiled and unoiled areas, and recovery is usually defined as a return to conditions comparable to those of unoiled areas. Because the differences between oiled and unoiled areas may have existed before the spill, statements of injury and objectives for recovery based on these differences are often less certain than in those cases where prespill data exist. However, there can also be some uncertainty associated with interpreting the significance of prespill population data since populations undergo natural fluctuations. Indicators of recovery can include increased numbers of individuals, reproductive success, improved growth and survival rates, and normal age and sex composition of the injured population.

Natural Resources

N, U **Bald Eagle:** Bald eagle population and productivity comparable to prespill levels.

N, U **Black Oystercatchers:** Populations that attain pre-spill levels, and reproduction and growth rates in oiled areas that are comparable to those in unoiled areas.

N **Clam:** Clam populations and productivity that are at prespill levels.

P, N **Common Murre:** Prespill populations and fledgling productivity of common murres at all injured colonies.

P, N, U **Cutthroat Trout and Dolly Varden Trout:** Growth rates and survival for cutthroat trout and Dolly Varden trout within oiled areas that are comparable to those for unoiled areas.

N, U **Harbor Seal:** Population trends in harbor seals that are stable or increasing.

N, U **Harlequin Ducks:** For harlequin ducks, prespill populations or when differences between oiled and unoiled areas are eliminated.

N **Intertidal Organisms:** For each intertidal elevation (lower, middle, and upper), community composition, age class distribution, population abundance of component species, and ecosystem functions and services at levels that would have prevailed in the absence of the oil spill.

P **Killer Whale:** Recovery of the injured AB killer whale pod to the 1988 level (of 36 individuals).

P, N, U **Marbled Murrelet:** Population trends in marbled murrelets that are stable or increasing.

N **Mussel:** Mussel populations and productivity which are at prespill levels, and which do not contain oil that contaminates higher trophic levels.

P, N **Pacific Herring:** Populations of pacific herring that are healthy and productive and exist at prespill abundances.

P, N **Pigeon Guillemot:** Population trends in pigeon guillemots that are stable or increasing.

P, N, U **Pink Salmon:** Populations of pink salmon that are healthy and productive and exist at prespill abundances. (An indication of recovery is when egg mortalities in oiled areas match prespill levels or levels in unoiled areas.)

N, U **River Otters:** For river otters, population levels are unknown but indications of recovery are when use and physiological indices have returned to prespill conditions.

P **Rockfish:** Populations of rockfish levels are unknown, but indications of recovery are when habitat use and physiological indices have returned to prespill conditions.

N, U **Sea Otter:** A population abundance and distribution of sea otters comparable to prespill abundance and distribution, and when all ages appear healthy.

P, N **Sediments:** Sediments whose contamination, if any, causes no negative effects to the spill-affected ecosystem.

P, N, U **Sockeye Salmon (Kenai River):** Population of sockeye salmon (Kenai River) that is healthy, and productive and exists at prespill levels. (One indication of recovery is when Kenai and Skilak Lakes support sockeye smolt outmigrations comparable to prespill levels.)

P, N, U **Sockeye Salmon (Red Lake):** Population of sockeye salmon (Red Lake) that is healthy, productive, and exists at prespill levels in Red Lake.

P, N **Subtidal Organisms:** For subtidal organisms, community composition, population abundance and age distribution of component species, and ecosystem functions and services in each injured subtidal habitat that have returned to levels that would have prevailed in the absence of the oil spill.

Other Resources

N, U **Archaeological Resources:** For archaeological resources, an end to spill-related injury including looting and vandalism rates that are at or below prespill levels.

N, U **Designated Wilderness Areas:** Designated wilderness areas where oil is no longer encountered, and when the public perceives them to be recovered from the spill.

Services

Subsistence: Subsistence resources that are healthy and productive and exist at prespill levels, and people that are confident that the resources are safe to eat. (One indication that recovery has occurred is when the cultural values provided by gathering, preparing, and sharing food are reintegrated into community life.)

Commercial Fishing: Population levels and distribution of injured or replacement fish used by the commercial fishing industry match conditions that would have existed had the spill not occurred. Because of the difficulty of separating spill-

related effects from other changes in fish runs, the Trustee Council may use prespill conditions as a substitute measure for conditions that would have existed had the spill not occurred.

Recreation and Tourism: Recreation and tourism fish and wildlife resources that are recovered; recreation use of oiled beaches that is no longer impaired, and management capabilities and facilities that can accommodate spill-related changes in human use.

Passive Use: A public that perceives that aesthetic and intrinsic values associated with the spill area are no longer diminished by the oil spill.

Attachment #5

MANAGEMENT PROCESSES

This attachment lists a goal and four objectives for management processes.

GOAL

A long-term, comprehensive and cost-effective restoration program comprised of integrated strategies that are a balanced combination of Monitoring and Research, Habitat Protection and General Restoration.

OBJECTIVES

Administration: Administrative costs that average no more than five percent of overall restoration expenditures over the remainder of the settlement period.

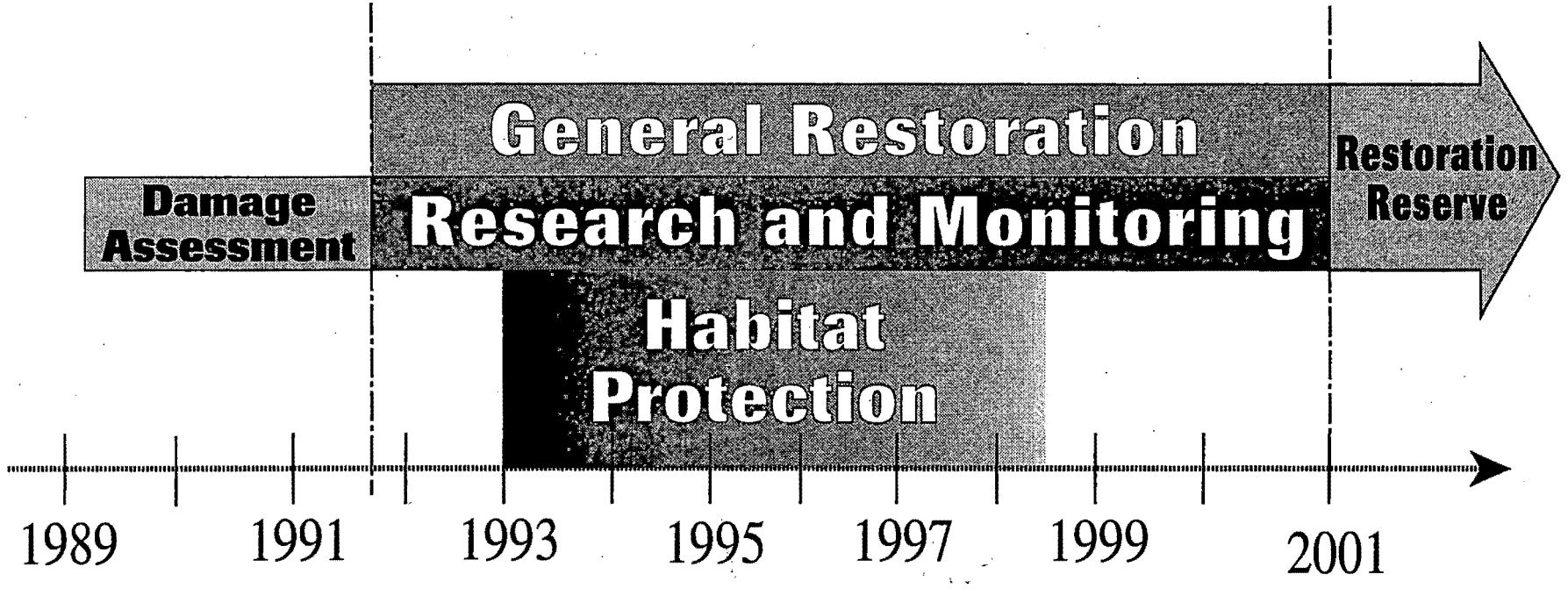
Integrated Research and Monitoring : A research and monitoring program that coordinates project development and design with goals and objectives; appropriately reflects and addresses ecosystem relationships; and ensures that collected data will be readily available and accessible to resource managers, policy makers and the general public.

Information Management: Information that is available in a timely manner and useable format to scientists, managers and the public.

Communication: A public involvement program that provides information and an opportunity for meaningful involvement in all levels of restoration — planning, project design, implementation, and review.

Restoration Plan Implementation

GOAL: A long-term, comprehensive and cost-effective restoration program comprised of integrated strategies that are a balanced combination of Monitoring and Research, Habitat Protection and General Restoration.



Organization Structure "Straw Dog"
Science Planning and Management
DRAFT 3/20/94

Restoration funds must be used "...for the purpose of restoring, replacing, enhancing, or acquiring the equivalent of *natural resources* injured as a result of the Oil Spill and the reduced or lost *services* provided by such resources..." Thus, restoration and restoration monitoring activities must be linked to the injured resources. However, we have recognized that a single-species approach to restoration is not adequate. The first policy stated in the Draft Restoration Plan is that the restoration program will take an **ecosystem approach**; this group has reiterated the ecosystem approach as one of the guiding principles. The organization diagram presented here is an attempt to describe a management structure that works from the base of the injured resources to develop an integrated, ecosystem approach to accomplishing the goals of healthy ecosystem components. Monitoring, ecosystem research, and active restoration projects must address the specific needs of particular injured resources in the context of restoring a healthy ecosystem. To implement this, we are proposing injured resource Work Groups coordinated by an interdisciplinary team.

Injured Resources Work Groups

1.) Responsibilities

A. Identify strategies, research approaches, and testable hypotheses for monitoring, research, and general restoration.
   a. Emphasis on integrated, interdisciplinary ecosystem approaches. SEA plan as an example.
   b. Needed for guidance of FY-95 proposals and beyond.

B. Annual review of resource status and strategies for achieving restoration objectives.

C. Recommend priorities for research and restoration activities needed to achieve restoration objectives.

D. Ensure communication, cooperation, and integration
   a. Within Work Group.
   b. Determine representative for Interdisciplinary Team for communication with other Work Groups.

2.) Composition

A. Scientists from resource disciplines, including PI's with projects for monitoring and restoration of the injured resources.

B. Scientists from other disciplines (e.g., oceanography, toxicology, ecosystem modeling).

C. Public participation. Meetings are open to the public and interested public are kept in the communication loop.

Interdisciplinary Team

1.) Responsibilities

A. Communication, coordination, and cooperation among Work Groups to ensure an integrated effort directed at restoration of injured resources and services and a healthy ecosystem.

B. Coordination of information from Work Groups on strategies, testable hypothesis, priorities, and progress towards restoration for review by the SRB and the Executive Director.

C. Coordination of activities with Restoration Work Force to facilitate agency administration and cooperation.

D. Coordination of Work Groups participation in annual workshops.

2.) Composition

A. Representatives from Work Groups.
   a. One representative from each Work Group.
   b. Executive Director must confirm selection.

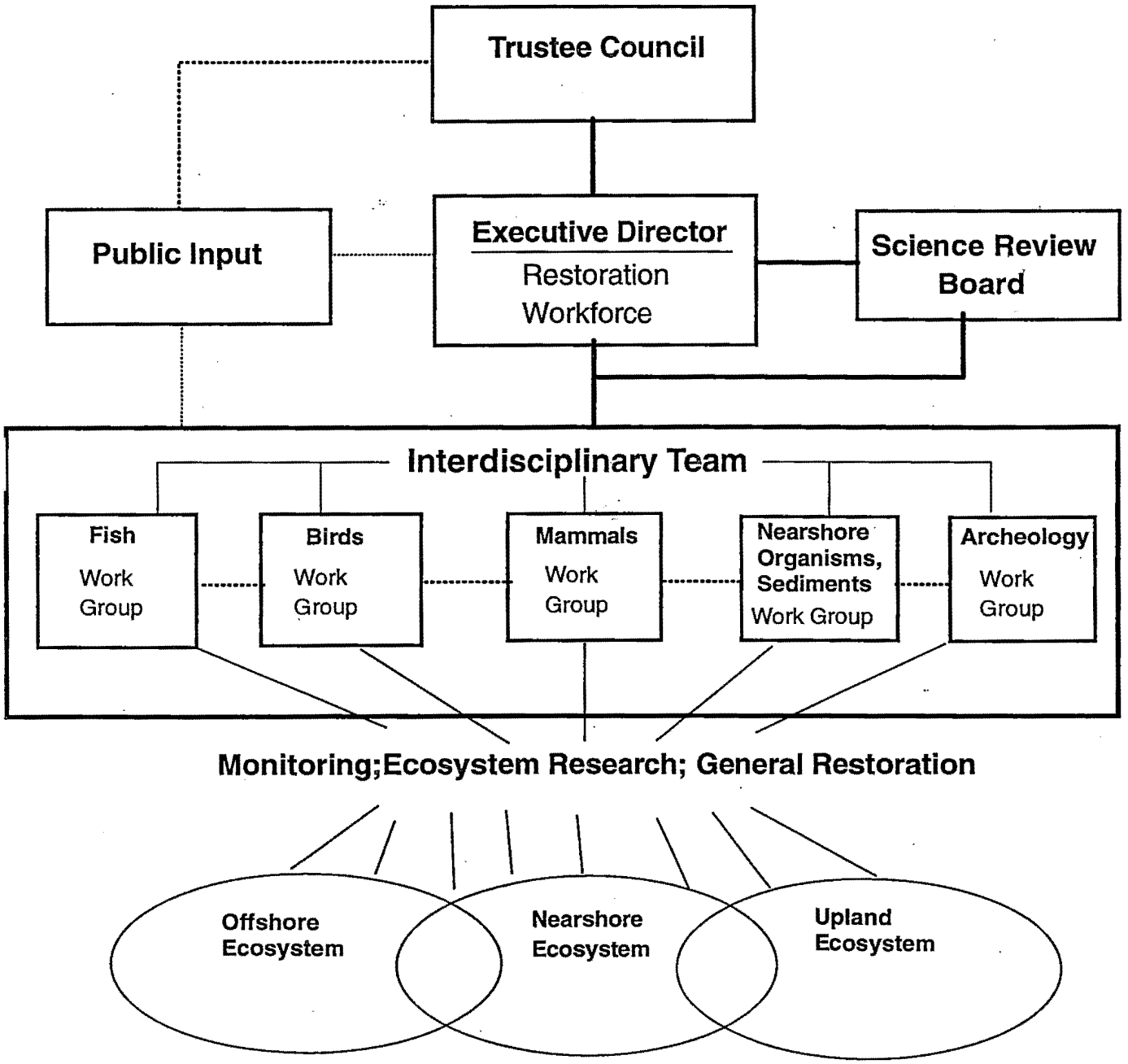
B. One State and one Federal representative from the Restoration Work Force, appointed by the Executive Director.

C. Trustee Council Chief Scientist.

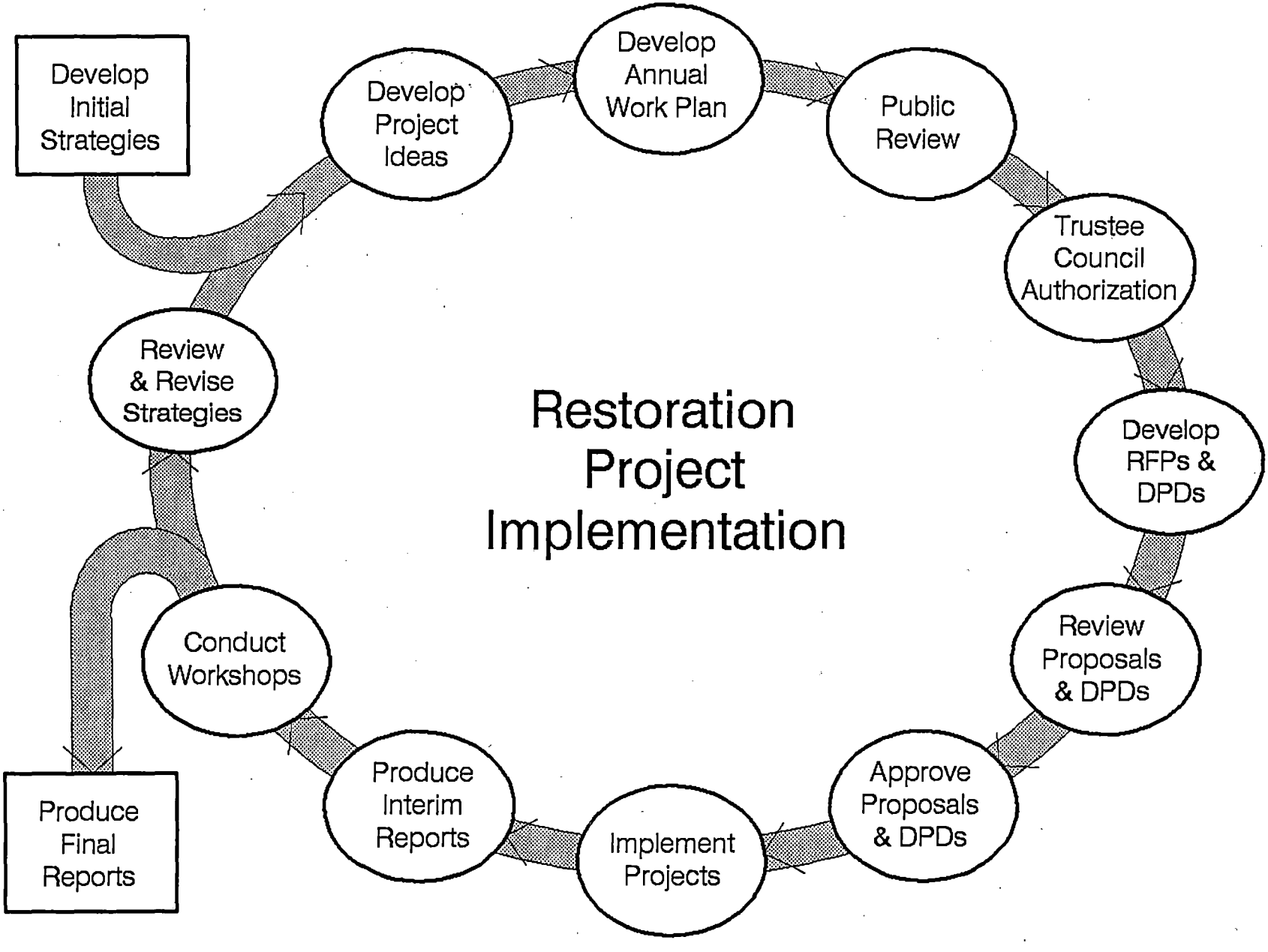
D. Public participation: Meetings open to the public.

Organizational Diagram Science Planning and Management

(DRAFT 3/19/94)



DRAFT


Develop Initial Strategies
Develop Project Ideas
Develop Annual Work Plan
Public Review
Trustee Council Authorization
Develop RFPs & DPDs
Review Proposals & DPDs
Approve Proposals & DPDs
Implement Projects
Produce Interim Reports
Conduct Workshops
Review & Revise Strategies
Produce Final Reports
Restoration Project Implementation

DRAFT

Science Review Board

DRAFT

Duties of the Board:

1. Recommend scientific priorities based on technical merit;
   - A. Identify meritorious ideas and projects
   - B. Recommend a prioritized list of ideas and projects
   - C. Recommend resolution of conflicts between competing proposals
   - D. Recommend the best proposal or combination of proposals for a given objective and/or project.

2. Assist in the development of an adaptive management process;
   - A. Help integrate research and monitoring efforts
   - B. Help the process run more efficiently and effectively
   - C. Help synthesize study results and information from other sources
   - D. Following review of results, recommend appropriate changes to ongoing and proposed work and identify new projects.

3. Review proposed, ongoing, and completed work;
   - A. Review proposals
   - B. Review project design
   - C. Review project conclusions and reports.

4. Assist the Executive Director explain what has been done, what has been learned, and what needs to be done;
   - A. Explain the effects of completed projects
   - B. Explain how proposed projects aid restoration
   - C. Explain how proposed projects affect the ecosystem.

Assumptions:

1. The Trustee Council makes decisions, the Science Review Board makes recommendations and presentations to the Executive Director and the Trustee Council as appropriate.

2. The Science Review Board primarily focuses on technical merit. Social issues and policy considerations should be incorporated by the Executive Director and Trustee Council.

3. Social objectives and policy are set by the Trustee Council. When appropriate, the Science Review Board will be requested to make recommendations on how to most efficiently and effectively implement those objectives and policies.

Printed: March 18, 1994

4. The Science Review Board will operate on a consensus basis with majority and minority reports on an issue when necessary.

5. Science Review Board members only work part time and are compensated appropriately.

6. Both compensated and uncompensated peer reviewers will be available to the Science Review Board as necessary to review proposals, project descriptions, and reports.

7. The Science Review Board will review Work Group product and make recommendations to the Executive Director and Trustee Council. Work Groups under the direction of the Executive Director and an Interdisciplinary Team will be set up for injured resources and services and/or appropriate categories (eg. terrestrial, nearshore, pelagic) to develop information on progress to date, testable hypotheses, research projects, and restoration implementation projects.

8. Science Review Board meetings will be open to the public.

9. Staff support will be provided by the Executive Director.

10. The Science Review Board will hold work sessions to synthesize research and monitoring information.

11. The Science Review Board will participate in an annual workshop which will be conducted to disseminate what has been learned and what projects and/or modifications of projects need to be considered for the coming year. The Board will also participate in development of the annual report to the public.

DRAFT

Qualifications and Membership:

1. Members must be recognized experts in their field of expertise with proven track records, must have a multi-disciplinary approach to problem solving, and must have demonstrated professional integrity.

2. Since continuity is important, prior knowledge of this oil spill is desirable.

3. The Board will consist of six to eight members including the Chief Scientist and needs to cover the following disciplines:
   A. Archaeology
   B. Birds
   C. Ecotoxicology/chemistry
   D. Fish
   E. Intertidal/Subtidal
   F. Marine Mammals
   G. Oceanography

   Additional expertise on specific topics will be covered as necessary from appropriate sources.

4. The Chief Scientist will chair the Board (including calling meetings, setting agendas, and conveying results).

5. Members will be appointed by the Executive Director following consultation with the Chief Scientist, the agencies, and interested public and confirmed by the Trustee Council.

6. The Executive Director will conduct an annual performance review of the Science Review Board and submit a report with recommendations to the Trustee Council. Members will serve at the pleasure of the Trustee Council.

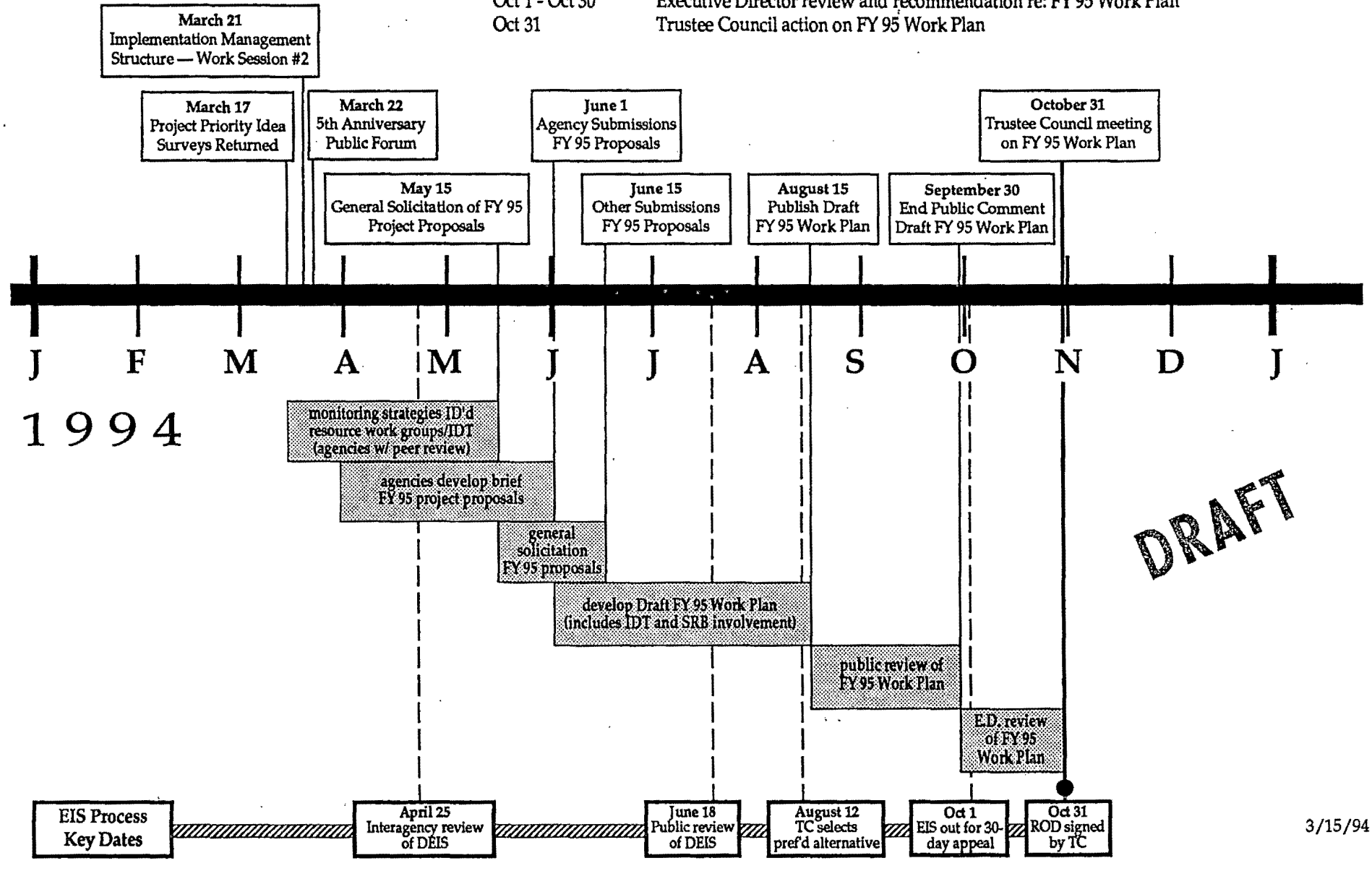
7. Members may not be contractually involved in the implementation of projects. Even the appearance of a conflict of interest must be avoided.

DRAFT

TIMELINE
FY 95 Work Plan Process

DRAFT

March 21	ɪmentation Management Structure work session #2
March 22	...nniversary Public Forum
March 23	Continuation of resource work group discussions (tentative)
March 15 - May 15	Recovery Monitoring Strategies developed (w/peer review)/resource work groups meet
April 1 - June 1	Agencies develop brief FY 95 project proposals
May 15 - June 15	General (non-agency) solicitation of FY 95 project proposals with strategy guidance packet
June 1 - Aug 15	Develop Draft FY 95 Work Plan and budgets/involvement of IDT and Science Review Board
Aug 15	Publish Draft FY 95 Work Plan
Aug 15 - Oct 1	Public comment/PAG review of FY 95 projects
Oct 1 - Oct 30	Executive Director review and recommendation re: FY 95 Work Plan
Oct 31	Trustee Council action on FY 95 Work Plan



3/15/94

Status Report: 1992 *Exxon Valdez* Oil Spill Restoration Projects

DRAFT

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Administration			**$5,076.1**	**$3,821.0**			
AD	Administrative Director's Office		$2,248.7	$1,960.0	Ongoing.	Not applicable.	
RT	Restoration Team		$2,827.4	$1,861.0	Ongoing.	Not applicable.	
Archaeological Resources			**$408.0**	**$232.8**			
ARC001	Archeological Survey	ADNR	$248.8	$118.7	Final report accepted.	See Reger, D.R., J.D. McMahon, and C.E. Holmes. 1992. Effect of Crude Oil Contamination on Some Archaeological Sites in the Gulf of Alaska, 1991 Investigations.	None.
R104A	Site Stewardship	ADNR USFS	$159.2	$114.1	Project is complete. Report awaiting final review.	Increased public knowledge of archaeological sites following the spill led to increased vandalism. A stewardship program to train local residents to protect cultural resources was developed. A site stewardship manual and field notebook were written.	None.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Bald Eagles			**$60.6**	**$60.6**			
B004	Eagles Damage Assessment Closeout	DOI	$60.6	$60.6	Report revised and submitted for final approval.	Reproductive success of Prince William Sound bald eagles was significantly impaired in 1989, and nest failures were correlated with the distribution of crude oil on beaches. Although estimated direct mortality throughout the spill area was relatively large (about 300 - 900 eagles), no change in the population could be detected due to wide variation in population counts. The Prince William Sound eagle population was expected to return to its prespill level by 1993.	None.
Clams			**$75.8**	**$51.8**			
FS013	Effects of Hydrocarbons on Bivalves	ADFG	$75.8	$51.8	Report being revised.	This study needs more extensive analyses of the data on which the conclusions are based and proper interpretations of the results.	Clams are an important prey for ducks, sea otters, river otters, and bears. This study is related to studies of these species.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Common Murres			**$392.4**	**$349.7**			
B003	Murres Damage Assessment Closeout	DOI	$75.7	$75.7	Final report accepted.	Numbers were reduced, nesting was delayed, and productivity rates were far below normal at major colonies within the spill trajectory. Reproductive success improved slightly in 1991.	R11 and 93049.
R011	Murre Recovery Monitoring	DOI	$316.7	$274.0	Report being revised.	Numbers of murres breeding at major colonies within the trajectory remained lower in 1992. Breeding chronology was delayed. Productivity at the Barren Islands was high than in other postspill years, but still lower than normal. Productivity at Pualc Bay was normal.	B3 and 93049.
Dolly Varden			**$148.6**	**$54.6**			
FS005	Dolly Varden Damage Assessment	ADFG	$22.2	$4.2	Report being revised (combined with R90).	See R90.	
R090	Dolly Varden Char Monitoring	ADFG	$91.5	$34.2	Report being revised (combined with FS5).	Two populations of Dolly Varden and cutthroat trout emigrated from lakes into the wake of the spill. Growth from 1989-1990 was 24% and 22% slower for recaptured subadult and adult Dolly Varden and 36% to 43% slower for subadult and adult populations of cutthroat trout in populations associated with the oil. This difference persisted through 1991 for cutthroat trout but not for Dolly Varden. Chronic starvation and direct exposure to petrogenic hydrocarbons were hypothesized as effects leading to reduced growth and accelerated mortality of both Dolly Varden and cutthroat trout.	R90 and R106 provide information on populations of Dolly Varden and cutthroat trout for 94320 (Ecosystem Study Plan).

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
R106	Dolly Varden Restoration	ADFG	$34.9	$16.2	Final report being revised.	The nature and extent of injury to Dolly Varden and cutthroat trout was documented in FS5. The goal of R106 was to provide information for developing a management plan to protect impacted stocks, while allowing for continued recreational fishing for sport anglers where stocks could support fisheries. Sixty-one streams were surveyed to provide this information.	FS5, R106, and 94320 (Ecosystem Study Plan).
Harbor Seals			**$25.0**	**$2.5**			
R073	Harbor Seals	ADFG	$25.0	$2.5	No final report for R73. A final report for MM5 is being reviewed.	Harbor seals continue to use heavily oiled haulouts even when unoiled sites were available nearby. They were observed to give birth and care for their pups on these sites. The pelage of both pups and adults became oiled when they used these sites or contacted oil in the water. however, the pelage became cleaner with time if they did not continue to use oiled sites. Many carcasses recovered were either stillborn or died shortly after birth. Observations suggest that stress and/or toxic effects of oil resulted in abortions, premature births, and increased mortalities in heavily oiled areas.	MM5

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Harlequin Ducks			**$447.4**	**$221.3**			
B011	Harlequin Ducks Damage Assessment Closeout	ADFG	$22.9	$21.7	Final report in second revision.	Petroleum exposure confirmed in four species of sea ducks. Hydrocarbons in food, liver and bile. Diverse intertidal prey used by ducks. Blue mussels are a key contaminated prey. 1990-1992 low harlequin breeding densities and negligible harlequin stream activity and production in western Prince William Sound. Report not yet accepted.	B2: status of populations. CH1B: contaminated prey. TS1: hydrocarbon analysis of food/tissues. Others: R71, and R103 (mussels), and 93036.
R071	Harlequin Duck Restoration and Monitoring	ADFG	$424.5	$199.6	Report being revised.	Comparative harlequin data in eastern Prince William Sound for B11. 1991-1992 harlequin production in eastern Prince William Sound similar to prespill. Techniques devised to capture and track harlequins. Breeding stream parameters and nest sites described. Additional oiled mussel beds identified.	B2 corroborated harlequin status in Prince William Sound. R103 documented continued oiled prey.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Harlequin Ducks			**$447.4**	**$221.3**			
B011	Harlequin Ducks Damage Assessment Closeout	ADFG	$22.9	$21.7	Final report in second revision.	Petroleum exposure confirmed in four species of sea ducks. Hydrocarbons in food, liver and bile. Diverse intertidal prey used by ducks. Blue mussels are a key contaminated prey. 1990-1992 low harlequin breeding densities and negligible harlequin stream activity and production in western Prince William Sound. Report not yet accepted.	B2: status of populations. CH1B: contaminated prey. TS1: hydrocarbon analysis of food/tissues. Others: R71, and R103 (mussels), and 93036.
R071	Harlequin Duck Restoration and Monitoring	ADFG	$424.5	$199.6	Report being revised.	Comparative harlequin data in eastern Prince William Sound for B11. 1991-1992 harlequin production in eastern Prince William Sound similar to prespill. Techniques devised to capture and track harlequins. Breeding stream parameters and nest sites described. Additional oiled mussel beds identified.	B2 corroborated harlequin status in Prince William Sound. R103 documented continued oiled prey.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Humpback Whales			**$17.3**	**$13.6**			
MM001	Humpback Whales Damage Assessment	NOAA	$17.3	$13.6	Report being revised.	No documented injury.	None.
Intertidal Ecosystem			**$1,501.0**	**$1,144.2**			
CH001B	Hydrocarbons in Mussels	NOAA	$51.4	$31.1	Report being drafted.	*Exxon Valdez* oil is located in oiled mussel beds. Mussels are concentrating the oil.	93036, B11, R71, and R103.
R102	Herring Bay Experimental and Monitoring Study	ADFG	$485.6	$324.3	Report being revised.	Cover of the dominant intertidal alga, *Fucus gardneri,* was reduced at oiled/cleaned sites. *Fucus* recruitment was poor in the mid- to upper intertidal, probably due to lack of shelter from desiccation and heating by adult plants. Limpet densities continued to be lower in the upper intertidal. Recovery appeared to be occurring in the lower intertidal zone in 1990-1991 and in the upper intertidal in 1993. Results have been incorporated into an interaction web to elucidate potential oil spill effects on community dynamics.	B11, CH1A, R103, and TM3.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
R103	Oiled Mussels	ADFG NOAA DOI	$874.0	$740.1	Report being revised. Project continued as 93036.	Identified 27 mussel beds with total petroleum hydrocarbons greater than 10,000 mg/g wet weight. Minimally intrusive site manipulation was conducted at three heavily oiled mussel beds. Black oystercatchers fed in oiled mussel beds. Chicks raised on oiled sites grew more slowly than chicks raised on unoiled sites. Differences in levels of blood haptoglobin and Interleukin-6 ir, which were previously found to be elevated in river otters inhabiting oiled compared to nonoiled areas in Prince William Sound, were not observed in Summer 1992. Additionally, river otters from oiled areas continued to regain body size from levels noted in 1990. This suggests that river otters may be recovering from chronic effects that were observed in 1990 and 1991. Consequently, no adverse effects in 1992 could be attributed to oiled mussel beds from areas where river otters were captured.	B11, B12, CH1B, R7, TM3, 93035 and 93036.
ST003A	Caged Mussels Damage Assessment	NOAA	$39.1	$24.2	Report being revised.	Mussels transplanted along spill trajectory accumulated particulated oil at concentrations that decreased with depth, elapsed time, and distance from heavily oiled beaches. In 1990 and 1991, low concentrations of polynuclear aromatic hydrocarbons were sporadically detected at locations adjacent to heavily oiled beaches. Petroleum hydrocarbons were detected only sporadically in mussels deployed in locations outside Prince William Sound in 1989.	ST3B.
ST003B	Sediment Traps Damage Assessment	ADEC	$50.9	$24.5	Report being drafted.	The subtidal sediment trap study demonstrated that oiled particulated matter derived from oil-impacted beaches in Prince William Sound contaminated adjacent subtidal sediments. The study further showed that the transfer rate of oil from beach to subtidal sediment was highest the year following the spill, and declined steadily thereafter.	ST3A and ST4.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Killer Whales			**$33.3**	**$23.9**			
MM002	Killer Whales Damage Assessment	NOAA	$33.3	$23.9	Final report accepted.	Whales missing from AB and AT pods. A total of 14 AB pod members lost from 1988-1990 due to unknown causes.	None.
Kittiwakes			**$7.5**	**$7.5**			
B008	Kittiwakes Damage Assessment Closeout	DOI	$7.5	$7.5	Revised report in review.	The number of breeding pairs did not decline at colonies in the oiled area of Prince William Sound but reproductive success in 1989 was less than expected, apparently due to low hatching success. Reproductive success did not recover by 1992 but whether the decline was due to the spill is unknown.	None.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Marbled Murrelets			**$444.1**	**$453.3**			
B006	Marbled Murrelets Damage Assessment Closeout	DOI	$24.8	$24.8	Report being revised.	The marbled murrelet population at a site within the path of the oil (Naked Island) was lower in 1989 than in prespill years, but returned to normal in 1990. Murrelet numbers in Kachemak Bay where oiling was minimal did not change following the spill.	R15 and 93051B.
R015	Marbled Murrelet Restoration Study	DOI	$419.3	$428.5	Annual progress report reviewed.	Using ground search techniques, 10 tree nests were found on Naked Island in 1991 and 1992. Nest trees were in stands of high volume and size class trees, and upland activity of murrelets throughout Prince William Sound was highest in such stands.	B6 and R15.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Multiple Resources			**$5,167.5**	**$3,504.2**			
AW001	Surface Oil Maps	ADEC	$17.0	$8.4	Report overdue.	Maps have been developed depicting the spread of oil on a daily basis for the first three months following the spill.	None
B002	Boat Surveys	DOI	$48.5	$48.5	Report being revised.	Populations of 9 species or species groups (black oystercatcher, pigeon guillemot, cormorants, harlequin duck, loons, scoters, newgull, arctic tern, northwestern crow) declined more than expected in the oiled zone of Prince William Sound suggesting an oil effect. Most injured species were ecologically tied to intertidal or nearshore areas.	93045
B012	Shorebirds Damage Assessment Closeout	DOI	$20.7	$20.7	Report revised and submitted for final approval. Revised report in review.	Spring migrant shorebirds (surfbirds and black turnstones) escaped impacts because shorelines used by these species (particularly around Montague Island) were largely unoiled. Black oystercatcher breeding was disrupted and hatching success reduced. Chicks raised on oiled beaches grew more slowly than chicks raised on unoiled beaches, perhaps due to ingestion of contaminated food.	R103 and 93035.
CH001A	Coastal Habitat Damage Assessment	USFS	$2,358.5	$1,454.7	Final report submitted and in review.	Serious and long-term lasting effects on intertidal algae. Recovery occurring but slow to none in upper intertidal habitat. Full recovery expected. Intertidal invertebrates indicate negative effects from spill. Intertidal fish findings were inconclusive.	B11, CH1A, FS13, R102, R103, MM6, R71, ST3A, TM3, TS1.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
FS001	Spawning Area Injury	ADFG	$64.3	$32.8	Report being drafted (combined with R60B).	Documented oil contamination of Prince William Sound pink salmon spawning area. Improved current and historic pink salmon escapement estimates which are necessary for accurate estimates of total wild returns. For preliminary results, see 1989, 1990 and 1991 NRDA Drafts Status Reports.	FS1, FS2, FS3, FS4A, and FS4B measured oil damages to specific life stages. FS28 incorporated their results into a model to estimate population level damages.
FS003	Coded-Wire Tags Damage Assessment	ADFG	$126.7	$38.7	Final report being reviewed.	Unable to detect significant differences in survival to adults from fry emerging from oiled and control streams. Also unable to detect significant difference in survival of hatchery fish reared in oiled versus unoiled areas of Prince William Sound.	FS1, FS2, FS3, FS4A, and FS4B measured oil damages to specific life stages. FS28 incorporated their results into a model to estimate population level damages.
FS030	Database Management	ADFG	$202.5	$151.1	Final report accepted.	Software was written to provide access to fish harvest database using the ADFG commercial fisheries Wide-Area Network (WAN). Procedures were implemented to provide reports in numerous database, spreadsheet, and statistical formats. Documentation and guidelines for using the harvest database were completed. WAN capability is now available between Juneau, Cordova, Anchorage, Kodiak, Soldotna, and Homer. See DiCostanzo, C. and B.P. Simonson. 1993. Database Management. Final Report, State/Federal Natural Resource Damage Assessment. 14 pp.	This database provides a repository for all NRDA and restoration projects information.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
R047	Stream Habitat Assessment	ADFG	$399.6	$323.9	Final report accepted.	About 250 km of shoreline and 260 km^2 of uplands were surveyed for anadromous fish streams on private lands on Afognak Island, resulting in discovery of 167 anadromous streams totaling about 56 km. Stream habitat parameters and upper extents of anadromous distribution were documented, and streams were mapped by GPS. Kuwada, M. and K. Sundet. 1993. Stream Habitat Assessment Project: Afognak Island. Habitat and Restoration Division Technical Report No. 93-3, *Exxon Valdez* Restoration and Habitat Protection Planning. 104 pp.	R47 information was used in evaluating lands for habitat protection and to supplement habitat information for marbled murrelet and harlequin duck projects.
R092	GIS Mapping and Analysis: Restoration	ADNR DOI	$125.5	$105.4	Completed. No report necessary.	Provided mapping and database support for restoration projects. Developed timber harvest database and land status and parcel maps for imminent threat parcels. Contributed to a 3-volume data dictionary produced for the Trustee Council by the Nature Conservancy.	Supported numerous restoration projects.
R105	Instream Survey Restoration Implementation Planning	ADFG USFS	$348.1	$148.5	Final report in preparation. USFS transmitted report to Chief Scientist.	Results of Cost:Benefit Study Implementation has been integrated and design planning has been completed. Awaiting construction funding. Cost:Benefit analysis for improved barrier bypass for Little Waterfall Creek on Afognak Island is positive.	Related projects: FS1, R47, 93024, 93032, and 93063. New project proposal: 94139.
ST004	Fate and Toxicity Damage Assessment	NOAA	$52.6	$55.1	Report returned for revision.	Results indicate that some toxicity was still associated in 1990 and 1991 with sediments from lower intertidal zones of heavily oiled sites. The fate of *Exxon Valdez* oil will include transformation of most constituents (through biodegradation and photooxidation) mainly into carbon dioxide and water, although some constituents may persist indefinitely.	AW4, ST1, ST2, ST3A, ST3B, ST7, TS1 and response studies.
TS001	Hydrocarbon Analysis	NOAA DOI	$1,028.3	$847.6	Report being reviewed.	Coordinated the chemical analysis of all samples collected by damage assessment studies to develop a single set of analytical data comparable across projects.	ST8 and TS3.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
TS003	GIS Mapping and Analysis: Damage Assessment	ADNR DOI	$375.2	$268.8	Completed. No report necessary.	Provided mapping and database support for damage assessment projects.	Supported numerous damage assessment projects, including FS 4, FS13, CH1A and R47.
Pacific Herring			**$303.6**	**$212.2**			
FS011	Herring Injury	ADFG	$303.6	$212.2	Report being revised.	Adult herring migrating to the spawning grounds in 1989 were exposed to oil. Exposure to oil continued throughout 1989 and into 1990. Internal tissues were damaged but the short- and long-term effects are speculative. There may have been a short-term effect which inhibited egg deposition and a long-term reproductive impairment (reduced survival of offspring). Eggs were deposited in oiled areas in 1989. Larvae hatched from exposed embryos suffered reduced survival.	None.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Pigeon Guillemot			**$18.0**	**$18.0**			
B009	Pigeon Guillemots Damage Assessment Closeout	DOI	$18.0	$18.0	Report being revised.	The population at a major breeding site within the spill trajectory (Naked Island) declined by 50% compared to 1972-1973 levels. The long-term decline predated the spill and, therefore, could not be attributed to the spill. Reproduction was largely normal following the spill.	93034
Pink Salmon			**$2,517.0**	**$1,915.3**			
FS002	Pre-emergent Fry	ADFG	$29.3	$11.4	Final report being reviewed.	Measured higher embryo mortalities in oil-contaminated streams than in unoiled streams.	FS1, FS2, FS3, FS4A, and FS4B measured oil damages to specific life stages. FS28 incorporated their results into a model to estimate population level damages.
FS004A	Early Marine Salmon Damage Assessment	ADFG	$145.2	$99.1	Report being revised.	Detected reduced growth and survival of fry rearing in oiled areas in 1989. No significant differences in growth and survival between oiled and nonoiled areas in subsequent years. Rate of adult returns to unoiled hatcheries twice that of oiled hatcheries in 1990.	FS1, FS2, FS3, FS4A, and FS4B measured oil damages to specific life stages. FS28 incorporated their results into a model to estimate population level damages.
FS004B	Juvenile Pinks	NOAA	$119.4	$121.2	Revised report in review.	Documented exposure and contamination of juvenile salmon in Prince William Sound. Contamination was associated with reduced growth. Ingestion of oil or oiled prey was route of contamination.	FS4A, AW3, and ST3A.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
FS028	Run Reconstruction	ADFG	$250.6	$126.4	Report being revised.	Estimated losses to adult populations from oil damages to early life stages at 2 to 3 million in 1990, and 40 to 70 thousand in 1991. Projected losses of 100 to 200 thousand adults in 1993 and 1994.	Through this project, results from FS1, FS2, FS3, FS4A and FS4B were incorporated into a model to estimate population level damage.
R060AB	Prince William Sound Pink Salmon	ADFG	$1,479.7	$1,204.3	Final R60A report being revised. R60C report being drafted (combined with FS1).	The CWT program (R60A) helped reduce the commercial harvest on damaged pink salmon populations by providing fishery managers with timely inseason fishery stock composition estimates. The escapement project (R60B) provided improved pink salmon escapement information which was essential for the precise fisheries management required to protect damaged wild stocks.	R60C monitors and investigates mechanisms for oil damage to early life stages of pink salmon populations. R60AB allows fisheries managers to protect damaged stocks from overexploitation.
R060C	Pink Salmon Egg/Fry	ADFG NOAA	$492.8	$352.9	Report being revised. Project continued as 93003. Expected to be continued into 1994 and 1995.	Oil exposures completed for 1992 and 1993 brood years. Persistence of elevated mortalities among embryos in oiled streams versus those in nonoiled streams suggests genetic damage. Spawning of surviving adults is scheduled for September 1994 with possible long-term genetic damage and survival of progeny to be determined in early 1995.	Related projects: B11, CH1B, R60AB, R103, 93003 and 93036.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
River Otter			**$74.0**	**$16.1**			
TM003	River Otter and Mink Damage Assessment in Prince William Sound	ADFG	$74.0	$16.1	Report being revised.	The results indicate that differences in home range, habitat selection, and latrine site abandonment, as well as changes in food habits, occurred in river otters.	CH1B and R103.
Rockfish			**$16.6**	**$17.3**			
ST006	Rockfish Damage Assessment	ADFG	$16.6	$17.3	Final report being revised.	Oil was determined to be the cause of death for a small number of demersal rockfish in Prince William Sound. Dead and dying rockfish were reported from the spill area. Of the five fish that were fresh enough to be necropsied, exposure to crude oil was found to be the cause of death. These results prompted additional testing for hydrocarbons in live fish. These tests showed at least 11 of 36 rockfish tested from oiled sites had been exposed to oil within 2 weeks prior to testing. None of the 13 fish from unoiled sites were exposed to oil. Subsequent studies showed some indications of sublethal injuries to rockfish from exposure to oil.	ST2A and ST2B.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Sea Otter			**$199.7**	**$199.7**			
MM006	Sea Otters Damage Assessment	DOI	$199.7	$199.7	The results of this project will be reported in 17 documents. Six final reports have been accepted. All other reports are being revised.	Direct mortality was probably on the order of 4000 sea otters, and the majority of the mortality probably occurred within Prince William Sound. In late 1991, patterns of mortality, as reflected in a relatively high number of prime-age carcasses, were abnormal compared to prespill patterns. Surveys showed no increase in abundance, and juvenile survival was low in oiled areas of western Prince William Sound. Preliminary data from 1992-1993 indicate some improvement in survival of juvenile and middle-aged sea otters.	93043
Shrimp			**$47.7**	**$15.9**			
ST005	Shrimp	ADFG	$47.7	$15.9	Final report accepted.	Hydrocarbon analyses did not detect oil contamination with sampled spot shrimp. Shrimp collected in unoiled areas had more inflammatory gill lesions than did shrimp from the oiled area. These results indicate that oil contamination had little or no effect on spot shrimp.	Relates to all other fish studies. Shrimp are a principal food source for fish and some whales.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Sockeye Salmon			**$1,681.0**	**$1,100.7**			
FS027	Sockeye Salmon Overescapement	ADFG	$630.0	$354.6	Final report accepted.	Approximately ten- to fifteenfold reduction in Kenai River smolt when compared to brood year 1987. Reduced smolt production from Akalura and Red Lakes, Kodiak Island. Reduced harvests for the Kenai are forecast for 1994 with returns below escapement levels possible for 1995 and 1996. Minimal harvests of Kenai River sockeye salmon are likely. Reduced harvest are forecast for Red and Akalura Lakes for 1994 through 1996. See Schmidt, D.C. and K.E. Tarbox. 1993. Sockeye Salmon Overescapement. State/Federal Natural Resource Damage assessment Status Report. FRED Technical Report 136. 65 pp.; and Schmidt, D.C., J.P. Koenings, and G.B. Kyle. In press. Predator induced changes in diet vertical migration of copepods in Skilak Lake, Alaska; a hypothesis to explain the decrease in overwinter survival of juvenile sockeye salmon (Onchorhynchus *nerka*).	R53 acquired new information to facilitate management of anticipated reduced future runs. R113 examined potential for hatchery-reared fry in Red Lake, but forecasted returns make the project unfeasible.
R053	Kenai River Sockeye Salmon Restoration	ADFG	$674.2	$434.6	Report being revised.	Successful collection of baseline and fishery samples for genetic stock identification. Unsuccessful in choosing new adult inriver hydroacoustic equipment. Successful hydroacoustic enumeration of returning adult salmon in Upper Cook Inlet.	R59 analyzed genetic samples collected by this project.
R059	Genetic Stock Identification	ADFG	$320.9	$257.2	Report being revised.	Genetic data were collected during 1992 from spawning populations contributing to mixed-stock harvests of sockeye salmon in Cook Inlet. These data can be used to estimate the presence of Kenai River stocks in mixed-stock areas of Upper Cook Inlet.	R53 collected spawning samples.
R113	Red Lake Sockeye Salmon Restoration	ADFG	$55.9	$54.3	Report being reviewed.	Red Lake does not need restoration effort but Ayakulik does.	FS27

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

No	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Storm Petrels			**$7.5**	**$7.5**			
B007	Storm Petrels Damage Assessment Closeout	DOI	$7.5	$7.5	Final report accepted.	At the largest storm-petrel colony within the spill trajectory (Barren Islands), no evidence of adverse effects to breeding petrels was found. Burrow occupancy rates were above average, nesting chronology was not delayed, and productivity was normal.	None.
Subtidal Ecosystem			**$541.3**	**$445.9**			
ST001A	Subtidal Sediments	NOAA	$103.5	$96.5	Report being drafted.	Subtidal sediments have been found to be contaminated at no fewer than 15 sites within Prince William Sound by June 1990. Contamination had reached at least 20 meters at some sites. Evidence of hydrocarbon movement downslope into subtidal sediments was detected by 1991.	ST1B
ST001B	Subtidal Microbial	ADEC	$17.1	$3.2	Final report accepted.	The numbers and activity of oil-degrading microorganisms were measured in sediments periodically for two years after the oil spill. Populations of oil-degrading microorganisms were significantly higher in sediments collected at oiled sites relative to reference sites. This information is useful in establishing the extent of contamination of the oil with time and also provides evidence that biodegradation is occurring naturally in Prince William Sound.	93047

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

#	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
ST002A	Shallow Benthic	ADFG	$109.8	$68.9	Final report being revised.	At oiled sites there was a decrease in some subtidal organisms relative to unoiled sites. Partial recovery observed in 1991.	B11, CH1A, R103, and TM3. Provides population assessment information for 94320 (Ecosystem Study Plan).
ST002B	Deep Water Benthic	ADFG	$44.9	$54.0	Report being revised.	Analyses of 1990 data collected approximately 16 months after the oil spill indicate that the deep benthic environment within the spill region appeared healthy. It appears that movement of water within the region of the oil trajectory was sufficient to flush out toxic fractions, resulting in minimal damage to life at depths of 40 to >100 meters.	CH1A, ST1B, ST2A, ST4, ST5, ST6, ST7, ST8, and TS1.
ST007	Demersal Fishes Damage Assessment	NOAA	$60.4	$55.1	Report being reviewed.	Results show continuing exposure of several benthic fish species and pollock, suggesting continuing petroleum contamination of subtidal sediments, water and food in 1990 and 1991 at sites up to 400 miles from the spill origin.	ST1A
ST008	Sediment Data Synthesis	NOAA	$205.6	$168.2	Report being drafted. Project continued as 93053.	Analyzed several thousand environmental samples, provided numerical correlations directly related to oil, and assessed associations of observed biological effects with concentrations of *Exxon Valdez* oil.	TS1, TS3, and 93053.
	1992 Total		**$19,211.0**	**$13,889.6**			

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 01/21/94 Financial Report, which reflects expenditures through 9/30/93. The total cost of some projects may be higher than the amount shown because, for the period 3/1/92 to 6/30/92, the State spent state funds rather than settlement funds and will request reimbursement at a later date. The budget figures for 1992 projects are for the period March 1, 1992 - February 28, 1993.

Status Report: 1993 *Exxon Valdez* Oil Spill Restoration Projects

DRAFT

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Administration			**$4,135.8**	**$2,792.2**			
93AD	Administrative Director's Office		$1,702.2	$1,268.8	Ongoing.	Not applicable.	None.
93FC	Financial Committee		$105.2	$52.6	Ongoing.	Not applicable.	None.
93RT	Restoration Team Support		$2,328.4	$1,470.8	Ongoing.	Not applicable.	None.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93 (7 months).** Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Archaeological Resources			**$1,760.1**	**$100.9**			
93006	Site Specific Archaeological Restoration	DOI ADNR USFS	$260.1	$100.9	Fieldwork is complete. Report is under preparation and expected to be submitted 1/15/94.	Not available.	
93066	Alutiiq Archeological Repository	ADEC	$1,500.0	$0.0	About to issue grant to Kodiak Area Native Association for construction of the facility.	Facility expected to open in early 1995.	None.
Black Oystercatchers			**$107.9**	**$51.0**			
93035	Black Oystercatchers / Oiled Mussel Beds	DOI	$107.9	$51.0	Draft report in revision prior to submission to Chief Scientist.	Growth rates of oystercatcher chicks were lower on oiled than unoiled nest sites. Some alphatic compounds were detected in 1992 fecal samples from oiled sites. Breeding pairs increased on oiled Green Island from 1992 to 1993 but decreased on Knight Island from 1991 to 1993.	93036 and 93045.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93 (7 months).** Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Common Murres			**$177.2**	**$135.7**			
93022	Monitor Murre Colony Recovery	DOI	$177.2	$135.7	Project report in preparation.	Murre productivity in the Barren Islands was 0.4 - 0.6 chicks per nest site in 1993, up from near zero in 1989. Population counts on plots were similar to or higher than in previous postspill years.	None.
Harbor Seals			**$233.5**	**$215.3**			
93046	Habitat Use, Behavior, and Monitoring of Harbor Seals in PWS (NEPA Compliance)	ADFG	$233.5	$215.3	Progress report has been completed.	Counts of seals at 25 trend sites in Prince William Sound were similar during pupping and molting in 1992 and 1993. However, 1993 pupping counts were 23% lower than in 1989. Molting counts were similar to 1989 postspill counts, but 27% lower than 1988 counts. Sixteen seals satellite-tagged since 1992 indicate that seals in central Prince William Sound haul out and feed near the same sites with little movement to other areas. Feeding usually occurs in depths of 100-200 meters, with a maximum recorded dive depth of 404 meters.	No related restoration projects. However, ADFG is conducting similar studies in southeast Alaska and near Kodiak.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93 (7 months).** Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Harlequin Ducks			**$300.0**	**$193.0**			
93033	Harlequin Duck Restoration	ADFG	$300.0	$193.0	Draft final report in preparation. Completed habitat evaluation assistance.	Only 3 harlequin broods observed in western Prince William Sound; 14 in eastern Prince William Sound. Decreased numbers of harlequins molting in western Prince William Sound in July. Suspect incomplete gonadal development in prenesting western Prince William Sound harlequins. Blood/physiological analysis and hydrocarbon analyses in process. Harlequin breeding stream/nest site model in preparation. Harlequin breeding assessment completed on North Afognak Island.	CH1B, R71, R103, and 94159. Project 93036 documents continued oil in prey species. 93045 surveys corroborate harlequin status in Prince William Sound. 93053: hydrocarbon database for sea duck samples.
Intertidal Ecosystem			**$912.3**	**$893.7**			
93036	Oiled Mussel Beds	DOI NOAA	$404.8	$389.1	Report in preparation. Continuation of R103.	Identified 27 mussel beds with total petroleum hydrocarbons greater than 10,000 mg/g wet weight. Minimally intrusive site manipulation was conducted at three heavily oiled mussel beds.	B11, CH1B, R71 and 93033.
93039	Herring Bay Experimental and Monitoring	ADFG	$507.5	$504.6	Draft report due by end of February 1994.	Recovery patterns and rates continued to be monitored and studied experimentally. Recruitment and growth rates of organisms at oiled and unoiled sites were studied relative to currents to test the hypothesis that oil tended to ground on the most productive coastal locations.	B11, CH1A, and R103.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93 (7 months).** Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Killer Whales			**$127.1**	**$113.3**			
93042	Killer Whale Recovery	NOAA	$127.1	$113.3	Report being drafted.	AB pod number has increased by one (a calf) to a total of 26. The 14 missing pod members were not present in 1993.	None.
Multiple Resources			**$40,680.1**	**$9,507.2**			
93038	Shoreline Assessment	ADEC ADNR ADFG NOAA USFS DOI	$539.2	$353.0	Report being drafted. Results presented to the Trustee Council 11/30/93.	Surface oil has become stable. Subsurface oil has decreased substantially since 1991. Oiling is discontinued throughout the study site.	93036
93041	Comprehensive Monitoring	NOAA	$237.9	$0.0	Request for proposals withheld by Trustee Council.	Not applicable.	All monitoring projects.
93045	Marine Bird / Sea Otter Surveys	DOI	$262.4	$257.2	Draft report in internal Fish and Wildlife Service review.	Overall marine bird population estimates in Prince William Sound have not changed significantly since 1989, but were 41% lower than 1972-1973 estimates. Rates of increase of goldeneyes and surfbirds were higher in the unoiled zone of Prince William Sound than in the oiled zone, whereas oystercatchers increased more rapidly in the oiled zone.	93033, 93034, 93035, and 93043.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93 (7 months).** Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

DRAFT

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
93051	Stream Habitat Assessment and Habitat Information for Murrelets	ADFG USFS DOI	$1,222.3	$790.3	This is the second and final year of the project. It is a continuation of R47. Draft report on habitat information for murrelets is in internal Fish and Wildlife Service review. First draft report on stream habitat assessment is being revised.	Late season surveys, sites at the heads of bays, low elevations, high percentages of forest cover, and large trees were all consistent predictors of high murrelet activity. Radar performed better than humans in detecting murrelets and was cheaper than boat-based or ground-based surveys by humans. About 995 km of shoreline and 117 km^2 of uplands were surveyed for anadromous fish streams on private lands on the lower Kenai Peninsula and in Prince William Sound, resulting in discovery of 186 anadromous streams totaling about 57 km. Stream habitat parameters were collected along all streams, upper extents of anadromous distribution were documented and streams were mapped by GPS.	Information will be integrated into the restoration GIS (93062) and supplement 93033. Also related to 93045.
93053	Hydrocarbon Database	NOAA	$105.5	$121.4	Report being drafted. Continuation of ST8.	Analyzed several thousand environmental samples, provided numerical correlations directly related to oil, and assessed associations of observed biological effects with concentrations of *Exxon Valdez* oil.	ST8, TS1 and TS3.
93057	Damage Assessment GIS	ADNR	$67.5	$62.1	Completed. No report necessary.	Provided mapping and database support for damage assessment studies. Cataloged and plotted over 160 maps for public access at OSPIC.	Supported numerous damage assessment projects, including B11, FS13, AW1, and CH1A.
93059	Habitat Identification Workshop	USFS	$42.3	$23.1	Final report accepted.	Identified parcels of nonpublic land containing critical habitat necessary for the recovery of injured resources and services.	93046, 93051, 93059, 93063, 93064, and 93065.
93060	Accelerated Data Acquisition	USFS	$43.9	$43.9	Project completed. Data collected.	Collected and organized existing resource data needed for the analysis of private lands in the oil spill area.	93046, 93051, 93059, 93063, 93064, and 93065.
93062	Restoration GIS	ADNR	$123.3	$122.1	Completed. No report necessary.	Provided technical mapping and database support for restoration projects. Generated spill area map and land status maps for Kachemak Bay, Seal Bay, and Eyak lands.	Supported numerous restoration projects, including 93038, 93063, 93064 and R47.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93 (7 months).** Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

No	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
93063	Anadromous Stream Surveys	ADFG USFS	$59.4	$59.0	Report for R105 is being revised.	This project was funded only for retrieving stream thermometers and completion of report for R105, not for field work. See R105 status report.	R105.
93064	Imminent Threat Habitat Protection	ADNR ADEC USFS	$37,850.0	$7,590.5	Completed. The Comprehensive Habitat Protection process was reviewed at a workshop; recommendations were incorporated into the process.	Imminent Threat Evaluation and the first round of Large Parcel Evaluation were completed. $7.5 million from settlement funds were combined with $14.5 million from other sources for the purchase of private inholdings in Kachemak Bay. $29,950,000 was committed from the most recent court request for the initial payment for purchase of private land near Seal Bay on Afognak Island. The total purchase price of this transaction is $38,700,000 with the balance to be paid in three annual installments. References: "Opportunities for Habitat Protection/Acquisition" (2/16/93) and "Comprehensive Habitat Protection Process; Large Parcel Evaluation & Ranking, Volume I" (11/30/93).	Data sources: 93051, 93059, 93060, 93062, and 93063.
93068	Non-Pink Salmon Coded Wire Tag Recovery	ADFG	$126.4	$84.6	Report being drafted.	Timely and accurate inseason estimates of hatchery and wild stock contributions to commercial harvest for improved management of wild stocks in mixed-stock fisheries.	93024 is designed to restore the natural population of sockeye salmon from Coghill Lake.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93 (7 months).** Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Pigeon Guillemot			**$165.8**	**$134.4**			
93034	Pigeon Guillemot Recovery	DOI	$165.8	$134.4	Draft report in review.	One hundred eighty-four colonies, concentrated in southwest Prince William Sound and in the Naked Islands were identified. Guillemots continue to decline in Prince William Sound from a high of 15,000 in 1970 to a present population of 3,000 - 4,900.	93045
Pink Salmon			**$911.0**	**$833.3**			
93003	Salmon Egg to Pre-emergent Fry Survival	ADFG NOAA	$686.0	$686.2	Report being revised. Continuation of R60C. Expected to continue into 1994 and 1995.	Oil exposures completed for 1992 and 1993 brood years. Spawning of surviving adults is scheduled for September 1994 with possible long-term damage to genetics and survival of progeny to be determined in early 1995. Persistence of elevated embryo mortalities in oiled streams in 1992 indicate possible genetic damage to wild pink salmon populations from the *Exxon Valdez* oil spill. Preliminary laboratory studies support the genetic hypothesis. Additional laboratory studies demonstrate dose response of pink salmon embryos when incubated in gravel exposed to crude oil from the *Exxon Valdez*.	R60AB and R60C. 93067 provides fisheries managers with information critical for protecting these chronically damaged wild pink salmon populations from overexploitation in commercial fisheries.
93032	Cold Creek Pink Salmon Restoration (NEPA Compliance)	ADFG	$5.0	$0.0	Final report accepted.	Cost:benefit analysis showed project to be marginal.	R105.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93 (7 months).** Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
93067	Pink Salmon Coded Wire Tag Recovery	ADFG	$220.0	$147.1	Report being reviewed.	Reduced commercial exploitation of damaged wild pink salmon populations through timely inseason estimates of hatchery and wild contributions to harvest. Accurate and timely stock composition estimates were used by fisheries managers to justify restriction of fishing fleet to areas where interception of damaged wild populations in mixed-stock fisheries could be minimized.	93003 demonstrated chronic damage to wild pink salmon populations in western Prince William Sound.
Recreation and Tourism			**$72.0**	**$40.8**			
93065	Prince William Sound Recreation	ADNR USFS	$72.0	$40.8	Continued as 94217. Analysis of findings and final report being drafted.	Recreation Injury Statement (10/93) was incorporated into the Draft Restoration Plan. Recreation restoration projects for Prince William Sound were prioritized through a public consensus process; high priority projects were included in the Draft 1994 Work Plan.	Expansion to other areas: 94216. High priority recreation projects: 94266, 94316, 94419, and 94420.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93 (7 months).** Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Sea Otter			**$291.9**	**$79.3**			
93043	Sea Otter Demographics and Habitat	DOI	$291.9	$79.3	Field work and data collected complete; data analylsis and report writing ongoing. Reports will be completed 3/1/94. Habitat component dropped.	Aerial survey of sea otters in Prince William Sound completed Summer 1993; estimated abundance is approximately 18,000. Age distribution of sea otter carcasses recovered in Spring 1993 in western Prince William Sound is similar to prespill distribution. Age- and sex-specific survival rates generated from carcass data for sea otters in Prince William Sound.	
Sockeye Salmon			**$1,719.7**	**$1,475.1**			
93002	Sockeye Salmon Overescapement	ADFG	$714.6	$637.1	1993 field data collection completed. Laboratory analysis approximately 50% completed. Final 1993 progress report will be submitted in March 1994.	1993 Kenai smolt demonstrated continued high overwintering mortality with less than 500,000 smolt estimated to migrate, while Tustumena Lake produced approximately 9 million smolt. Red and Akalura lakes demonstrated poor smolt production on Kodiak Island. Fall 1992 Tustumena and Skilak Lake dry fat content support poor nutrition going into winter as probable cause of mortality in Skilak Lake. Adult 1992 returns to the Kenai River were consistent with smolt estimates. However, primary age class of the 1989 brood year will return in 1994 and will determine accuracy of smolt estimates. (Recent improvement in forecasted returns for 1994.)	93012 and 93015 provide information useful in managing expected low returns to the Kenai River in 1994-1996.
93012	Genetic Stock Identification of Kenai River Sockeye Salmon	ADFG	$300.6	$292.6	Report being drafted.	Genetic data were collected during 1992 and 1993 from spawning populations contributing to mixed-stock harvest of sockeye salmon in Cook Inlet. These data were used in a pilot study to estimate the component of Kenai River stocks harvested in mixed-stock areas of Upper Cook Inlet.	Collection of spawning samples is being conducted by study 93015.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93 (7 months).** Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
93015	Kenai River Sockeye Salmon Restoration	ADFG	$512.6	$402.3	Draft report due 3/31/94.	Successful collection of baseline and fishery genetic samples. Successful inseason hydroacoustic survey of Upper Cook Inlet by subcontractor.	Genetic samples analyzed by 93012.
93024	Restoration of Coghill Lake Sockeye Salmon Stock	ADFG USFS	$191.9	$143.1	Lake fertilization completed for 1993 season. Lake morphology completed.	Monitoring showed the need for modifying both the type and concentrations of fertilizer.	None.
Subsistence			**$317.8**	**$253.9**			
93016	Chenega Bay Chinook and Silver Salmon (NEPA Compliance)	ADFG	$10.7	$10.7	Final document due to lead federal agency (NOAA) on 1/14/94.	Not applicable.	Not applicable.
93017	Subsistence Food Safety Survey and Testing	ADFG NOAA	$307.1	$243.2	Analysis of samples collected is ongoing.	First round of tests for hydrocarbon contamination of subsistence resources showed little or no contamination. Results of second round of testing are pending. The observations of abnormalities in the tested resources caused a shift in concerns of subsistence users from oil contamination to what effects these abnormalities have on these resources.	This project depends on information from all resource restoration projects as well as the shoreline oiling survey.

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93** (7 months). Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

No.	Title	Agencies	Amount Budgeted*	Amount Spent*	Status	Results and References	Related Projects
Subtidal Ecosystem			**$1,000.8**	**$871.8**			
93047	Subtidal Monitoring	ADEC ADFG NOAA	$1,000.8	$871.8	Draft final report on 1989-1991 and 1993 due on 6/30/94.	As a follow-up to previous studies from 1989-1991, the numbers and activity of oil-degrading microorganisms were measured in sediments collected in 1993. Preliminary results suggest some contamination remains in subtidal sediments. However, generally very low numbers and activities were found where visible oil was present (e.g., subsurface sediments, Northwest Bay). These results support the hypothesis that populations of oil-degrading microorganisms are good indicators of the presence of biodegradable (e.g., relatively "fresh") oil in Prince William Sound. 1993 infaunal samples have been processed and analyses are underway. Epifauna appears reduced from previous years. Sea urchins are more abundant. Hemosderosis in fishes from oiled sites.	ST1A, ST1B and 93053.
	1993 TOTAL		**$52,913.0**	**$17,690.9**			

* Dollar amounts are shown in thousands of dollars. "Amount Budgeted" is derived from requests to the court for disbursements from the settlement account. "Amount Spent" reflects settlement fund obligations only and is derived from the 1/21/94 Financial Report, which reflects expenditures through 9/30/93. **The budget figures for most 1993 projects are for the period 3/1/93 - 9/30/93 (7 months).** Five projects (93032, 93046, 93059, 93060, and 93045) were started earlier.

List of Invitees
Ecosystem-based Management Structure for Implementing the EVOS Restoration Plan
March 21 - 23, 1994

Trustee Council Staff:

Jim Ayers - Executive Director, fax 907-586-7249/276-7178 Anch
Molly McCammon - Director of Operations, fax 907-276-7178
Eric Meyers - Project Manager, fax 907-276-7178

Chief Scientist & Peer Reviewers:

Bob Spies - Applied Marine Sciences, fax 510-373-7834
Pete Peterson - University of North Carolina, fax 919-726-2426
George Rose - DFO Canada/Open, fax 709-772-4188
Glenn Juday - University of Alaska, Fairbanks, fax 907-474-7439
Andy Gunther, Applied Marine Sciences, fax 510-373-7834
Phil Mundy, Peer Reviewer, fax 503-636-6335

Agency Staff:

Byron Morris - National Marine Fisheries Service, fax 907-789-6608
Alex Werthheimer - National Marine Fisheries Service, fax 907-789-6608
Jeep Rice - National Marine Fisheries Service, fax 907-789-6608
Dave Gibbons - U.S. Forest Service, fax 907-586-7555
Sandy Rabinowitch - U.S. DOI, National Park Service, fax 907-257-2510
Jerome Montague - Ak Department of Fish & Game, fax 907-465-4759
Mark Brodersen - Ak Department of Environmental Conservation, fax 907-465-5375
Kim Sundberg, Ak Department of Fish & Game, fax 907-349-1723
Jess Grunblatt, Ak Department of Natural Resources, fax 907-276-7178
Bob Loeffler, Ak Department of Environmental Conservation, fax 907-276-7178
Art Weiner, Ak Department of Natural Resources, fax 907-278-7178
L.J. Evans, Ak Department of Fish & Game, fax 907-258-9860
Tony DeGange, U.S. Fish & Wildlife Service, fax 907-786-3350
Bill Hines - National Marine Fisheries Service, fax 907-586-7249
Veronica Gilbert - Ak Department of Natural Resources, fax 907-276-7178
Kathy Frost, Ak Department of Fish & Game, fax 907-452-6410
Jeff Short, National Marine Fisheries Service, fax 907-789-6094
Marilyn Dahlheim, National Marine Fisheries Service, fax 206-526-6615
Tracy Collier, National Marine Fisheries Service, fax 206-860-3335
Leslie Holland-Bartel, U.S. DOI, National Biological Survey, fax 907-786-3636
David Irons - U.S. Fish & Wildlife Service, fax 907-786-3641

Public:

Tom Van Brocklin - PWS Communities Organized to Restore the Sound, fax 907-835-3864
Torie Baker - PWS Ecosystem Assessment Planning Group, fax 907-424-3430
Dan Hull - PWS Ecosystem Assessment Planning Group, fax 907-243-1679 call first
John French - Fisheries Industrial Technology Center, Kodiak, fax 907-486-1540
Gary Kompkoff, Tatitlek, fax 907-325-2298
Gail Evanoff, Chenega, fax 907-573-5135
Steve Planchon, The Nature Conservancy, fax 907-276-2584
Pam Brodie, Sierra Club, fax 907-258-6807
Brad Phillips, Public Advisory Group, fax 907-276-5315

Ted Cooney, University of Alaska, Fairbanks, fax 907-474-7204
Donald Schell, Universtiy of Alaska, Fairbanks, fax 907-474-5863
Chip Treinen, Area K Seiners 345-2417
Ken Hill, Prince William Sound Science Center, fax 907-424-5820
Jerome Selby, Mayor of Kodiak Borough, fax 907-486-9374
Theo Matthews, 283-9540

Exxon Valdez Oil Spill Trustee Council

Restoration Office
645 "G" Street, Anchorage, AK 99501
Phone: (907) 278-8012 Fax: (907) 276-7178

TO: Work Session Participants

FROM: Molly McCammon, Director of Operations

DATE: March 16, 1994

SUBJ: Implementation Management Structure Work Session #2

I look forward to your involvement in the upcoming Implementation Management Structure work session on Monday, March 21st in the Anchorage Restoration Office (645 G Street). The meeting will start at 9:30 am (please note the change in the starting time).

You should have already received a prior letter regarding this work session, together with a copy of materials developed at the initial Implementation Management Structure work session held in mid-January. The purpose of this memo is to provide you with a draft agenda and some additional information pertaining to the March 21st work session.

At the first work session in mid-January, participants collaborated to develop a management-by-objective structure that can be used in an on-going manner to implement the restoration mission of the Trustee Council. The purpose of this work effort is to develop an Implementation Management Structure that will be published as an Appendix to the *Draft Exxon Valdez Oil Spill Restoration Plan*. (A copy of the *Draft Restoration Plan* is being mailed to you for your reference in case you do not already have a copy.) In particular, materials developed at the first work session included Guiding Principles as well as Injured Resource and Service Goals and Objectives. Notes from the mid-January meeting, including these documents, have been previously distributed under separate cover.

On March 21st, we will pick up where the first work session left off. As reflected in the draft agenda, we plan to start with an update on recent Trustee Council actions and activities, followed by a brief review of the materials developed at the first work session. We will then move into a discussion of the on-going effort to establish an organizational structure to guide

formulation of annual work plans consistent with the Trustee Council directive that the restoration program take an ecosystem approach. This will include discussion of the proposal to establish a Science Review Board (SRB). This will be followed by a discussion of the FY 95 Work Plan timeline and process, including an initial summary of results from the Survey of FY 95 Restoration Work Plan Priorities as well as a discussion of efforts to identify appropriate recovery monitoring schedules for each injured resource and service. As time allows, and depending upon how much progress we make in our morning discussions, we are also tentatively scheduling time to have focused discussions concerning appropriate restoration strategies for groups of injured resources and/or services (birds, fish, marine mammals, etc.). It is intended that these discussions will continue on Wednesday, March 23rd for those who are interested.

I hope that you will be able to participate in this work session and want you to know that I greatly appreciate your time and willingness to help with this effort. The challenge we collectively face — to restore the health and productivity of the spill-impacted ecosystem — is without precedent. The ultimate result of our efforts may not be apparent for generations. Taking the time now to put in place an implementation structure that can effectively guide restoration activities over the long term is essential if we are to succeed.

* * * * *

If you have any questions, please let me know or contact Bob Loeffler in the Anchorage Restoration Office (278-8012).

attachments
— draft agenda
— draft FY 95 work plan timeline

DRAFT

3/15/94

AGENDA

Implementation Management Structure — Work Session 2

Anchorage Restoration Office • 645 "G" Street
March 21, 1994 — 9:30 am
(PLEASE note change in time.)

I. Introduction (Jim Ayers)

— update on Trustee Council activities:
- FY 94 Work Plan implementation
- Habitat Protection/Acquisition
- 5th Anniversary Public Forum

— the Implementation Management Structure in context:
- the Draft Restoration Plan
- the Restoration Plan EIS
- annual work plans ... how they fit together

II. Review of Work Session #1 Products (Bob Loeffler)

— Mission Statement
— Definitions
— Guiding Principles
— Injured Resource Matrix
— Goals and Objectives

III. Organizational Structure/SRB (Alex Wertheimer/Mark Brodersen)

IV. FY 95 Work Plan Development

— FY 95 Work Plan Timeline/Process (Bob Loeffler/Veronica Gilbert)
— Survey of FY 95 Priorities - Summary (Eric Myers)
— Monitoring Strategy Identification (Byron Morris)

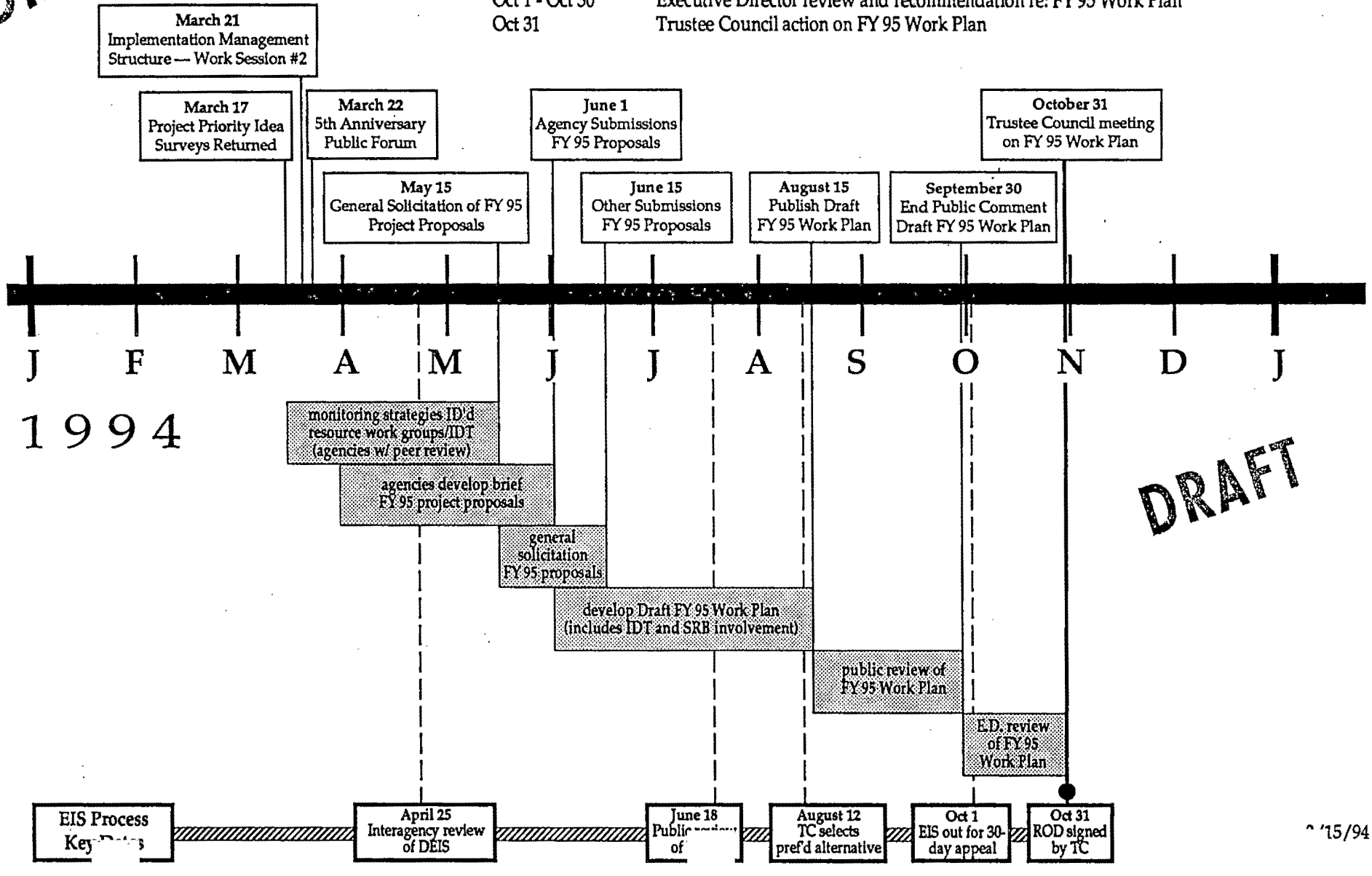
V. Restoration Work Group Discussions

DRAFT

TIMELINE
FY 95 Work Plan Process

DRAFT

March 21	Implementation Management Structure work session #2
March 22	5th Anniversary Public Forum
March 23	Continuation of resource work group discussions (tentative)
March 15 - May 15	Recovery Monitoring Strategies developed (w/peer review)/resource work groups meet
April 1 - June 1	Agencies develop brief FY 95 project proposals
May 15 - June 15	General (non-agency) solicitation of FY 95 project proposals with strategy guidance packet
June 1 - Aug 15	Develop Draft FY 95 Work Plan and budgets/involvement of IDT and Science Review Board
Aug 15	Publish Draft FY 95 Work Plan
Aug 15 - Oct 1	Public comment/PAG review of FY 95 projects
Oct 1 - Oct 30	Executive Director review and recommendation re: FY 95 Work Plan
Oct 31	Trustee Council action on FY 95 Work Plan



'15/94