PUBLIC MEETING SESSION

U.S. ARMY CORPS OF ENGINEERS

DRAFT LOWER SNAKE RIVER JUVENILE SALMON MIGRATION FEASIBILITY REPORT/ENVIRONMENTAL IMPACT STATEMENT

WITH

FEDERAL CAUCUS CONSERVATION OF COLUMBIA BASIN FISH "ALL-H PAPER"

CLATSOP COUNTY FAIRGROUNDS

92937 WALLUSKI ROAD

ASTORIA, OREGON

MULTI-PURPOSE ARENA/EXHIBIT HALL

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MR. RIC ILGENFRITZ: Let me explain what CRI is, briefly. It's got three basic features:

One, it tries to establish baseline extinction risks to give us a sense of how bad a shape these fish are in.

Second, as I alluded to earlier, it tries to do a sensitivity analysis across all the life stages to give us a sense of where to work for survival improvements, which phase of that life cycle is liable to yield up the survival improvements, or which combination.

Three, to do a feasibility analysis of actually going out and getting those improvements.

What we published in the fish appendix for the Corps of Engineers were the results for the Snake River stocks. Since we've done that, we got initial returns back from the Upper Columbia stocks and for the remaining Mid Columbia and Lower Columbia stocks. We'll be publishing that information by the end of this month.

Just to give you a sense of how this is working, I'm just going to go through what we found for the Salmon River stocks.

Starting with spring/summer Chinook, what we determined is over the near term period, over ten years, spring/summer Chinook are facing about ten percent possibility extinction. Over a hundred years, it goes up to 30 percent. For some index populations, up to 50 percent.

For fall Chinook, a slightly different story. Again, over that longer period, that goes up to 6 to 17 percent.

Then for steelhead, they're kind of in the middle. In the near term, they're in pretty good shape because they're very abundant. Over the long-term, their glide path is extremely steep, a 90 percent risk of extinction.

We're taking a lot of questions on whether we set the extinction threshold in the right place or not. Those are legitimate questions. Some people think we're too conservative; some people think we're not conservative enough.

These fish are in very bad shape. This is a very, very serious problem. If you look at the numbers we've got for the Upper Columbia spring Chinook and steelhead, those numbers are very similar to what you see there for steelhead, 90 to 95 percent extinction risks. That gives you a sense of the baseline problem.

Where do we need to try to get to in order to stabilize these populations? For spring/summer Chinook, we're estimating if we can get a 12 to 15 percent improvement in population growth rate, we can get the extinction risk down to one percent over 100 years.

For fall Chinook, we're looking for a four percent improvement in population growth.

For steelhead, we're looking for a ten percent improvement in population growth.

Sensitivity analysis. Where do we actually go look for these improvements? For spring/summer Chinook, we found that the period of highest mortality is the first year of life up in the spawning areas where they come out of the gravel. Spring/summer Chinook rear in the upper tributaries, they spend some time there before they start coming down the river.

We're estimating, therefore, if we can secure survival improvements during that first year of life by improving the quality of spawning and rearing habitat, we have a very real chance to make a contribution to recovery.

For fall Chinook -- before I leave spring Chinook. With respect to harvest, that's not really as big a deal because there really is no more commercial harvest on spring Chinook. We're not looking to gain big benefits from harvest.

Fall Chinook is a similar story. The highest period of mortality is that first year of life. The difference here is that fall Chinook spawn in the main stem of the river and they come out of the gravel and they start heading right down the river. They're not as well-developed, not as strong.

The hydrosystem impacts are significant. Once they get through the hydrosystem, they spend a lot of time in the

estuary. We're, therefore, looking at the quality of estuary habitat and what we need to do there to make sure these fish have the habitat they need to make for the transition into the ocean.

Steelhead, they kind of get beat up all the way through. They're very abundant right now, so they get hit pretty hard in harvest, but they also spawn way up in the upper tributary, so they have to run a gauntlet of some very degraded habitat.

That's a real quick look at what we're finding and how we're trying to characterize the nature of the problem these fish are facing.

What I'm going to do is run through the options within each H and get into the alternatives.

We have three different options within each lifestage. They all represent improvements on the status quo. I'll briefly describe those. When I get to the alternatives, what those are is packages of options. I have four of those that basically define the spectrum of the ways we could go.

You know, you all took high school math and you know that there are many more different combinations of alternatives you could put together. What I'm doing here is just for illustrative purposes to give you a sense of what the broad recovery strategies we're considering are. We want

to hear from you about how you think we ought to piece those things together.

I'll start with habitat. Option number one for habitat is to improve and prioritize federal actions, to basically look at all the different agencies in the region that have programs to address habitat, federal habitat, non-federal habitat, coordinate those programs and those budgets to ensure the maximum biological benefit to fish irrespective of what's going on at the state level or local level or tribal governments.

Option two is essentially option one plus a very aggressive collaborative effort to try to weave together, if you will, a recovery quilt that crosses jurisdictional lines and addresses the needs of each subbasin where we have a listed population. Again, a negotiated, collaborative approach.

Then option three is if option one and option two don't work, to take a much more aggressive enforcement or regulatory approach using our Endangered Species Act, in the case of EPA, Clean Water Act authority.

Within the harvest arena, three basic approaches again.

One, we've referred to a fishery benefit during recovery. In that instance, you'd have an abundance-based fishery based on escapement goals. Once you have each of the

populations to the point where they're reaching their escapement goals, you would allow fishing to happen. Assuming you have the fish on a rebuilding trend, fishing would increase as the populations rebuild.

Option two is a bit more aggressive. You'd fix harvest levels where they are now and keep them there for a period of time, five years, ten years, and get the biological benefit of those increased escapements over that time, then at some point in the future you'd go back to an abundance-based approach.

Then the third and much more aggressive approach there is to rachet back harvest even more than it already has been, reduce it to a conservation level where you are pretty much allowing harvest where you know you don't have mixed stock fisheries and you know what you're getting is hatchery fish that are produced specifically for harvest.

The hatchery options more or less correspond to the harvest options. Option number one is an incremental approach to improving the quality of production hatcheries over time. The Power Planning Council and some of the federal agencies have engaged in a review of hatchery production and have committed to a series of reforms.

Under this approach we would essentially allow those reforms to happen incrementally over time, trying to improve the performance and quality of the fish being produced at our

existing facilities.

Option two would be to go ahead and start doing those reforms at the production hatcheries, but also to start using conservation hatcheries where we know we have weak stocks. For those of you who don't know, a conservation hatchery differs from a production hatchery in that it's designed to propagate a specific genetic strain of salmon or steelhead in a specific location and produce returning adult spawners as opposed to producing fish for harvest.

Then option three is the most aggressive. There you'd move into your weak stock areas with conservation hatcheries and you'd rachet back production aggressively in many places or specific places in order to try to minimize the potential negative impacts of hatchery fish on wild fish.

Then within the hydrosystem, again, three options.

Option one is the current program. Again, this represents an improvement on the status quo, the hydro-division of our agency, the Corps of Engineers and Bonneville, are contemplating a series of incremental survival agencies in the coming year. The Colonel will go through this in the presentation of the EIS.

We try to incrementally improve juvenile and adult survival project by project and system-wide throughout the migration corridor.

Option two differs from that in that you would

basically speed up the -- increase the amount of money you're spending and speed up the timetable for implementing some of the improvements contemplated under option one so you would in effect be doing everything you could in the hydrosystem short of breaching dams.

Then option three, of course, is to go ahead and start work on removing the Lower Snake dams.

The alternatives. I'm going to run through these again. These are four examples of how you could package these options to represent recovery strategies.

Alternative one would emphasize breaching. You'd go ahead and do the work on breaching the Snake dams and continue to seek incremental improvements and reforms in the other lifestages.

I'm talking fast, I'm going fast. If you have questions that I haven't been able to cover here, please feel free to step next door and you'll find somebody who can help you out.

Option two differs from -- alternative two differs from alternative one in the sense that it would be a harvest-based strategy where you basically emphasize harvest reductions first, seek incremental improvements elsewhere within the system, and evaluate that over a period of time to see how it was doing.

Alternative three is what we call aggressive

non-breach. This is a euphemistic reference to emphasizing habitat. We would go into the tributaries and aggressively try to negotiate habitat improvements, whether it's land use or water use, land acquisition, repairing habitat improvements, improvements or removal of in-river structures in the tributaries, all those things you need to do to make sure you have a good warm home for these fish to return to and at the same time pursue incremental improvements within the other lifestages.

Alternative four is called maximum protection. That's essentially taking the most aggressive option within each lifestage, shutting everything down as much as you can and letting it ride for a period of time and hope you get to recovery. You breach the dams, track back harvest, shut down production hatcheries, you'd move forward with aggressive enforcement of ESA and the Clean Water Act.

That's a snapshot of the science in the All-H Paper, the options and alternatives that we've defined. Where we go from here is we're developing a biological opinion for the hydrosystem which will determine what hydrosystem operations look like over the next period of years, and that will be a document we'll look to release in early May, early to mid May.

At the same time, we'll be revising this All-H Paper on the same time frame to provide a recovery backdrop against

which that biological opinion will fit. Then thereafter we'll move into a more aggressive recovery planning phase where we'll use what we've done in the All-H Paper to start scoping out recovery plans for each individual population of salmon that's listed.

I want to thank everyone for being here. I want to thank the panel for being here. I look forward to hearing the testimony. Thank you very much.

COLONEL ERIC MOGREN: What I'd like to do now then is run through the two studies that we're collecting testimony on. The first being the Salmon River study, the second is on the John Day drawdown. Both of these studies were called for in the '95 biological opinion. I'm going to start with the Salmon River study.

I want to start off by emphasizing that the Corps has not yet reached a preferred alternative on whether the dams should be in or out. Our intent to issue a revised draft after we go through this public comment period, probably sometime end of summer, early fall, that would include a preferred alternative.

The timing on that will depend on the number and nature and complexity of the comments we get during the comment period. We're thinking probably September, October time frame.

Primary objective in the study is to compare

alternatives for improved fish migration conditions through the Lower Salmon River.

The study was comprehensive. I want to say we started out with 15 or 20 different options that we boiled down to major alternatives. All four of these were looked at through engineering, biology, economic, social and for the environmental effects. The geographic scope is about 140 miles from the mouth of the Salmon River near Pasco, Washington, up to the inland seaport of Lewiston, Idaho.

All four dams are similar and have the same basic features. There's a powerhouse, a spillway, a navigation lock and then an earthen embankment. These are large dams, about a hundred feet high. The reservoirs are anywhere from 30 to 40 miles long, and multi-purpose projects serving purposes such as navigation, irrigation, recreation, power production, and fish and wildlife. The dams are not operated for flood control.

I want to real quick now run through the four alternatives that are currently on the table.

Alternative one are the existing conditions or what we refer to as the base case. Under this option, all four of the Lower Snake dams, of course, are equipped with various fish passage facilities. Adult salmon pass through the dams through ladders. The survival for the adults moving up through each dam is about 99 percent.

There's three ways a juvenile fish can move through the projects as we move down river: the first being over the spillway, the second is through the turbines, and the third is through the bypass facilities.

Currently we also collect about 50 percent of the fish migrating down the river for transport by truck or barge, taken downstream and released below Bonneville Dam.

The system survival is now at about 50 to 60 percent through the dams for fish that travel in river, and this is up from between 10 and 40 percent in the 1970s. So we've seen about a threefold increase in juvenile survival as they move through the system. The survival is about 98 percent for transported fish.

Now, what we don't understand is an issue of -- the issue of indirect mortality. Now, what this is about is there's a theory that the fish that are transported or pass through the system may be stressed or harmed or somehow affected where their long-term survival in the ocean is affected by going through the system here, and the technology is now in place to get to a firm answer on that through the pit tag (phonetic) technology. That data is being collected by NMFS.

The second alternative is to maximize the transport program. Now, alternative two contains everything I've just mentioned in alternative one, with the exception, of course,

that there would be no need for spill over the dams, and there would be no need for improvements for the spillway deflectors to help mitigate for dissolved gases.

The third alternative is what we term major system improvements. Now, like alternative two, it also maximizes the number of juvenile fish transported. It differs from alternative two in that it incorporates full-length surface bypass collectors at Lower Granite Dam. This new collection technology in combination with the existing bypass screens would increase the collection of fish going down through the system. You would therefore have more fish transported and more fish not affected through going through the rigors of the Lower Snake dams and other dams.

Alternative four is the breaching option. This calls for breaching the earthen portion of all four dams and creating a free-flowing river about 140 miles long. The navigation lock, the power house, and the spillway, the concrete superstructure, would stay in place but would obviously cease operation.

This option also would call for some engineering modifications, predominantly to facilities currently along the banks like the railroad tracks, roads, bridges crossing the river. Because of the drop of the water level in the reservoirs, you have a sloughing problem there. That would have to be reinforced to maintain those facilities.

The question then is, which alternative provides the best condition for salmon and steelhead? I'm not going to repeat what Ric talked about in the science. We do have technical staff here who can answer those questions if you have them further. I don't think there's a need to belabor that point.

I do want to talk to the economics a little bit. Each of the four alternatives has effects. However, the dam breaching alternative would result in the most significant economic changes to the region. This table shows a summary of those economic effects, primarily through the drawdown regional economic work group process.

This was a process that the Corps chaired, but where we invited interest groups, river users, environmental groups, to participate in our collection of data and the analysis of the economic data that was presented. These numbers represent national economic development and are relative to the base case. These are average annual costs, amortized over a 100 year economic life period.

As you can see, I'm not going to go through each line, but generally under this analysis, where we're at right now in the draft study, the breaching has an economic cost of approximately $250 million per year for a hundred years. The primary economic driver is the replacement of the lost power. The non-breaching alternative -- all three of the

non-breaching alternatives produce relatively little change on jobs or communities as compared to the breaching option.

Now, the breaching has measurable short-term and long-term effects. The short-term net gains are primarily due to construction activity such as the removal of the dams and so on, but with a long-term net loss to the region. Currently our analysis shows about 700 jobs lost in the Salmon River region, and approximately 2000 jobs in the North Pacific, in the Northwest.

Now, I want to mention at this point that some of the economic data and study has been challenged by folks during the public hearings and all. So what I would ask, as we go through the hearing process, if there are interest groups or economic users or whatever that have additional analysis or things that may not have been considered, we are welcoming that kind of input and we ask for that.

Where do we go from here? We release the draft in December. The current public comment period ends at the end of March, 31st of March. For those who haven't seen it yet, there are copies of the report available on the web. We also have it available on CD and paper copy. I believe we have it in CD copy and paper copies available on request to the Walla Walla district.

As I mentioned before, we intend to issue a revised draft late this summer and put in our preferred alternatives

as a basis of the data collected and what we learned from these various public hearing meetings.

What I'd like to do now then is turn and talk to the John Day drawdown study. What we did was what we call the Phase I of the study. Its purpose was to evaluate the potential benefits for fish and wildlife, evaluate social and economic effects of drawdown, and make recommendation to Congress on whether or not to proceed to Phase II.

The Phase II study would provide a level of information -- excuse me, the Phase II study would provide the same level of information and analysis for John Day as we've done for the Lower Snake.

The Corps study (inaudible) drawn down alternative levels. They're shown here on the chart. The first would be drawn to the spillway crest level, which is about 50 feet below the normal operating pool for which the project is currently operated. The natural river level would drop it down to about a hundred feet below the normal level.

John Day, unlike the Snake dams, it is operated for flood control, has about 500,000 acre feet of flood control storage behind it. We look at this from the standpoint of both of these drawdown levels and retaining flood control protection, both of these levels without flood control protection.

Again, we looked at the biological, social and

economic impacts, the cost of each of these options and the potential physical impacts. The effects of all four alternatives on fish were evaluated. What we looked for was the maximum potential fish benefits in coming to our preliminary recommendation.

Of the options studied, the natural river drawdown level, without flood control, provided the maximum benefits to the listed Salmon River and Upper Columbia Chinook salmon. The Phase I study indicates very little gain for Salmon River salmon. We could expect gains for the Upper Columbia River spring Chinook, but not at levels sufficient to ensure recovery. As you know, the Upper Columbia spring Chinook are a listed species. We would see probably some significant increases to the upper bright Chinooks, which is not a listed species.

The estimated total cost to implement the drawdown to the natural river level, without flood control, the implementation costs total come to about $3.3 billion. On an annual basis, that's the $225 million you see at the top of the slide. When you roll in all the other costs and impacts, it comes out to about $587 million a year for a 100 year period, amortized over a 100 year life cycle period.

By comparison, the expense for the drawdown to river level and retaining the flood control would cost about $698 million per year, amortized over the 100 year period.

So based on the costs, based on the assessment of the biological data, the Corps is putting forward the recommendation in the draft report that we do not go forward with the Phase II study.

Now, I want to emphasize this is still a draft report. Part of this public comment period is to collect additional comments and information on this study. This public comment period for this study, like the Salmon River study, ends on the 31st of March.

What we'll do then is forward our recommendation up to Congress. We cannot initiate then Phase II without direction from Congress. They may or may not accept whatever the final recommendation is.

I think that's it for the slides. I thank you for your patience and attention. I'm going to turn this back over to our moderator to take us through the Q&A period.

I would ask if the elected officials and the gentlemen representing Umatilla care to make comments, we would ask you to come forward and do that when we start our testimony period after the Q&A period.

MODERATOR: Thank you, Colonel. Thank you, Ric.

I want to ask that if you have a question to ask, there are question sheets that you can fill out at the front table. We really would like to make it clear that these questions are simply to clarify a point that you want some

clarification on or the process that we're in.

If you have specific questions or detailed technical questions, as the Colonel just mentioned, the open house is still functioning over here. There are specialists and technical people there that can probably answer your specific questions.

The first question --

COLONEL ERIC MOGREN: I notice a lot of our technical staff is sitting up here. I'd ask one of you to go back there just in case folks have a question. Also, could we turn the lights back on, please.

MODERATOR: Thank you.

The first question is, and this is a question I'm going to be addressing to the panel up here: Do you think selective fishing techniques will be an important element in the long-term and do you expect most hatchery fish to be marked so they can be selected for harvest?

MR. RIC ILGENFRITZ: Yes and yes. If you remember back to the early part of my comments, I said the third part of the CRI analysis is a feasibility analysis of how to go out and actually get survival improvements.

Improving selectivity is something we're interested in pursuing. A lot of the fisheries that are partially our responsibility for regulating are administered pursuant to treaties, so, you know, actually going out and applying

selectivity improvements will be a process of negotiation and mutual agreement over time.

But selectivity clearly has shown promise and eliminating a mixed stock fishery is something we've got to try to do more broadly. NMFS supports marking.

MODERATOR: Given the fact that the only healthy stock, wild spawning salmon, in the Columbia River, comes from the free-flowing Hanford stretch, why is it not obvious that more habitat like that is what will create more healthy stocks? That's the first question.

Second: Is it not true that salmon must have flowing water over gravel beds?

MR. RIC ILGENFRITZ: I assume that one is for me. Again, if my answers are incomplete or unsatisfactory, I'll refer you next door to some of the biologists and technical folks who can get into more detail with you.

On the CRI analysis, when we were looking at fall Chinook in the Salmon River, we projected that removing the Lower Snake dams would increase available fall Chinook habitat by about 70 percent. It would be a little bit more than double what they currently have.

That's good, but it also sort of ignores the fact that 90 percent of that fish's historical spawning habitat is blocked by the Hells Canyon project. So they exist today on a postage stamp of spawning habitat that's below Hells Canyon

dam, and we could improve that and increase that habitat by about 70 percent if we took out the Snake dams. It's not clear whether that by itself would be enough to recover the species.

With respect to water flow and whatnot, clearly water and soil and substrate and gravel characteristics are critical for spawning and rearing habitat.

MODERATOR: Those are the only two written questions that I had. Now we're going to get ready to move into the public testimony. Just to clarify ground rules, because I see there are more people here now than were here before, remember that this meeting is not an attempt at a consensus or a vote, it is an opportunity for members of the public to have their thoughts heard and considered by federal officials. So please don't disrupt that opportunity.

As the Colonel already mentioned, you may provide written comments on the Corps' draft EIS or Federal Caucus All-H Paper and related reports such as the Corps' John Day drawdown study at any time during this comment period. It isn't necessary that it only be tonight.

COLONEL ERIC MOGREN: Does anybody else have a question they want to jot down? Why don't you bring them on down. We'll cover that.

MODERATOR: Bring them up here.

Let me finish this while you're doing that. I want

to repeat that comment forms, there are a variety of comment forms in your packet. There are several different forms on several different subjects. They have as much weight as testimony, as if you got up to speak tonight. There is a tape-recorder and a person to operate that tape-recorder in a little booth at the front door. That's available, too.

I want to emphasize that there are a variety of ways to turn in your comments tonight. If you need to leave early or you can't wait for all of the testimony to be completed, make that available to us. As I said, written and oral comments are treated equally.

Just a few details. Public restrooms are out in the main lobby, just off of the lobby. There are also two pay phones out there. Emergency exits, if we need them, there's an emergency exit at that corner and there's another one at that corner in addition to the doors that you came in when you arrived.

The other questions:

Will breaching the dams affect private farms -- lands and farms? Although concerns of wild fish are mentioned, it still appears that they take a backseat to hatchery fish. What is projected plans for protecting wild fish?

COLONEL ERIC MOGREN: I'll address the first part about the irrigation and the farming, then I'll ask Ric to

address the part on the biology of the fish.

Yes, it would affect irrigation. There's some 30, 35,000 acres of cropland, mainly orchards, that are irrigated out of the reservoir behind the Ice Harbor dam. These farms would either go out of business or they would have to relocate their intake pipes to a lower level to get the water, or look for another source of water.

AUDIENCE: Would it affect flooding?

COLONEL ERIC MOGREN: No. Those orchards are up on a bluff over the river.

MR. RIC ILGENFRITZ: With respect to the biological question, wild fish versus hatchery fish, I'm not sure I quite got it clear. Let me just make a comment by way of background.

We're seeing similar decreases in population trends for hatchery fish that we're seeing for wild fish. This problem is not unique to wild fish. Fish throughout the basin are declining in very severe numbers.

The numbers that I went through in my presentation with respect to extinction risks and the productivity improvements we're looking for apply to wild fish.

I guess if I was going to sum up the findings of the CRI analysis, I would say that what it's showing is that it's going to require a range of actions across all the lifestages to get this collection of listed stocks to recovery.

There is no silver bullet. Breaching looks most promising for fall Chinook and steelhead, but as the Colonel said earlier, it doesn't look like it does much for spring Chinook, and it certainly doesn't do anything for stocks listed through other parts of the Columbia basin.

Defining the plan for protecting wild fish broadly is what we're trying to do here, what I tried to spell out with that summary of the scientific results.

COLONEL ERIC MOGREN: I want to go back to the flooding question. I took the question to mean, Would the dams have an impact on flooding those agricultural areas? The answer to that is no because they're on higher ground.

With regard to flood control throughout the basin, those dams are not operated for flood control. There is some storage there, but depending on flow, if you're in a flood situation, you can squeeze out some storage there if conditions are absolutely right, but they're not operated for flood control.

MODERATOR: Another question here. This is addressed specifically to you, Colonel.

In your remarks on the John Day drawdown, you stated that drawdown would benefit the upriver bright population, but in your booth materials, I take it they're talking about the materials here, say drawdown would decrease upriver bright populations. Could you clarify the discrepancy?

COLONEL ERIC MOGREN: Let me take a look at the materials because I'm not sure if it was a misunderstanding there or not. Mr. Stanger is our project manager. If you would see him, please, he can help straighten that out. I think there's a misunderstanding there somewhere.

MODERATOR: Would they know where to find it?

COLONEL ERIC MOGREN: Stu, would you raise your hand, please.

The upriver brights would be benefitted by lowering the dam.

MODERATOR: The next question, this is also to you, Colonel: Would the Colonel repeat the survival rates for both upstream and downstream migrations for Salmon River salmon.

COLONEL ERIC MOGREN: I think what he's talking about, the adults going up. Our information shows that you have about a 99 percent survival rate of adults going through each dam. For fish that travel in river, that are not transported, starting from Lower Granite going all the way down to the estuary, you have a survival rate of 50 to 60 percent. Again, that's up about threefold from where it was in the early '70s before we put the passage mod figures in and so on in all the various dams.

For the transported by barge or truck, the survival rate is about 99 percent. The caveat on that is how you feel

about the indirect mortality. Is there something that happens during the passage through the dams or in the transport that causes the fish to be in a weakened condition when they move out to the ocean and causes them not to come back? That's a question that's under study right now.

We have the technology through the pit tag (phonetic) data which, for those who may not be familiar with it, is almost like a chip that you put in the smolts going down - combination driver's license, Social Security card, birth certificate - that identifies if it's a hatchery fish, where it came from, where it was picked up. That data is read when the fish come back through the river. Through that, we'll be able to get some hard numbers and trends to answer that question of indirect mortality.

We have two years of good data. Two years obviously don't make a trend, but that data is coming in. In a few years, you ought to be able to answer that question fairly definitively.

MODERATOR: The next question is also to you, Colonel. The Colonel mentioned we should remember the context. The question then is, is not the context a judge's ruling for a decision on hydro to be made in a system that cries out for a major overhaul? Isn't that the context for the hydro decision?

COLONEL ERIC MOGREN: I think we can frame the

context any way anybody wants to frame it. The context we're looking at is to focus on the recovery of the salmon. To focus only on the hydropower system there, particularly in the Salmon River dams, misses a huge part of that equation.

Now, whatever the ultimate answer is for that equation, that's what we're trying to get to. Hydropower is obviously going to be part of it. Don't misunderstand my comments. May be that the final equation has dams in it, that it has dams out. We haven't reached that point. It has to include all the aspects that affect the fish: hatchery, harvest, habitat and hydropower system.

MODERATOR: What happens to the sediments behind the Snake dams if they are breached? Is it predicted they will build up in lower downstream dam reservoirs or will there be an attempt to dredge them out?

COLONEL ERIC MOGREN: Right now we would not have any plans to dredge them out. I believe that was looked at. Greg Graham, our study manager, is next door. He could talk the details of that analysis.

But we figure there's about 150 million cubic yards of sediment backed up behind those four dams. Of that 150 million cubic yards, our analysis is that about half of that would end up washing downstream. 50 to 75 million cubic yards -- and that would occur over maybe a ten-year period depending on water years and so on. Of that 50 to 75 million

cubic yards, about half of that would probably flush out in the first couple to three years. Now, the degree to which that gets caught up behind the lower dams or washes out to the estuary, I'm not prepared to answer that. Again, that analysis was done, and Greg can talk to that.

It is a mixture of materials. You have some fine materials in there and you have some heavy sands. The sands will tend to settle out earlier, then the finer material would tend to move further down the river. Specifically how far each type would go, I can't answer that up here. I don't know.

MODERATOR: That was the last question.

Now we're going to go into the public testimony. For those of you who weren't here before, let me just summarize how we're going to do this.

I have about 45 names signed up so far. As you see in the agenda, there will be three minutes per person. In order to do this in the most expeditious way, what I'm going to do is to read the first three names off of sheet one, sheet two and sheet three, then we'll progress for each of the three sheets continuously until we finish.

What I'd like you to do, when I read your name off, would be if you would come up here and just stand here and we're going to use this mic that I'm holding now. We have a system for guiding each of you as to how much time you have.

Jessie Phelps, over here, staffing the light bulbs, she's with BPA. The light will turn green when you begin, they'll turn yellow when you have a minute left, and red when you have no more time, the three minutes are gone.

We'd appreciate it if you would wind up quickly if you're still talking when that red light goes on and wind up your presentation so that the next person will have a chance.

We're going to begin now. Sheet number one, the first person who signed up for sheet number one, forgive me if --

COLONEL ERIC MOGREN: If the elected guys could come up.

MODERATOR: I'm sorry, yes.

COLONEL ERIC MOGREN: And our tribal representatives.

MODERATOR: There were three elected officials that identified themselves earlier. If you'd like to be given an opportunity to put something in the record for testimony, I'd like to invite you to come up at this time. We had a City Council member, a Port Commission member, and I forgot who the other was.

COLONEL ERIC MOGREN: Another Port Commission member.

MODERATOR: Did any of you wish to say something for the record?

AUDIENCE: I don't wish to cut the line. I'll wait my turn.

COLONEL ERIC MOGREN: We had one tribal representative. Why don't you come up. As he's coming up, let me mention again, would each of you say your name and the organization.

SPEAKER: My name is Rick George. I'm a staff member with the Confederated Tribes of the Umatilla Indian Reservation. I very much appreciate the opportunity to cut in line. We are out here from the Umatilla Indian Reservation, flew out at 5 a.m. this morning, are driving back to Portland tonight, fly out early tomorrow. I very much appreciate that and very much appreciate the sensitivity from the audience to allow me to speak first.

The Confederated Tribes of the Umatilla is a confederation of three tribes. The reservation is located in northeastern Oregon on the Umatilla River. It's the Walla Walla, Cayuse and Umatilla tribes.

They signed a treaty with the Federal Government in 1855 and ceded to the Federal Government 6.4 million acres of land, and all resources that went with it. They got in trade for that a reservation homeland to live upon, and they reserved very specifically rights to themselves that they already had. One of those rights is to fish for salmon for economic, cultural, traditional and religious uses. I want

to talk specifically for a minute about the issue of the context.

I agree very much with Colonel Mogren's advice that we need to look at the big picture, we need to look at the whole thing. We also need to recognize that many, many doors have already been closed. John Day, for instance, has been -- draft opinion says basically the John Day dam at Bull Pool with turbines operating is good for fish, and it should stay.

We have decisions that have been made for other dams that are in place and aren't going to go anywhere that permanently block about half of the historic salmon habitat. We have federal processes now that are ongoing, and a decision is ripe and ready for the Lower Salmon River, and it is time for us to focus on that decision not in a vacuum, but to focus on that decision and to make the right decision in the context of all of the rest of the habitat, harvest and hatchery decisions that must be made now and at the same time that we decide to breach the lower four Salmon River dams and restore 140 miles of reservoir back to river conditions that are a home for the salmon.

One of the things that the tribes is out here to do, in addition to being here at the hearing, is to tell the people of Astoria that there's a huge missing factor in the federal processes, and that's you, that's people really

influencing decisions, really having an impact on what comes out of this federal process.

What we're here -- what the Umatilla tribes are here to offer is their treaty rights to work for people, to work for commercial fishermen down here on the coast, to work for people throughout the Columbia basin and to work for tribal members. So the tribes is here to fill a big gap that the Federal Government can't fill, and that's to accommodate human values, family values.

We believe that in order to take out four federal dams on the Lower Salmon River, which must be done to prevent extinction, you've got to give people certainty who are going to be impacted negatively by that. So we ask for your assistance, to help us work with the irrigators on the 13 farms who need to know that they're going to continue to have water before this decision is made to breach the dams and to transport commodities through the Snake and Columbia River system and to give people certainty in the coastal communities for fishing, tribal communities for fishing, that salmon will be here for our children forever.

MODERATOR: I have one more question that was given to me just as Mr. George was coming up.

This question is to each of you. Have each panel member accounted for increased economics to the region due to improved fisheries resulting in increased tourism and more

jobs related to habitat rehabilitation?

COLONEL ERIC MOGREN: Let me address that. That's a function of the DEIS in the Salmon River. The answer is yes, that was looked at. Again, I would encourage those of you that are interested in that aspect to look at that study. If there's something you would like to add or was missed or requires a different look, please comment on that.

Certainly we looked at it, analyzed it. That's not a final analysis at this point. That was more the Corps that had done that.

MODERATOR: Thank you.

I'm going to call three parties here. The first party, as I was going to say before, forgive me if I'm fracturing your name, I'll do the best I can with the writing. The first name on the first list Karl Magnuson. First name on the second list, Liz Hamilton. The third name is Ron M-a-x-h-e-a-d.

I'm going to ask you to address the panel. That's the group that you're speaking to, is the panel. It also will help you see the lights when they go on.

SPEAKER: My name is Karl Magnuson. I live in Salem, Oregon. I grew up here in the Astoria area. As a child, I remember climbing up on the stone benches at the Union Steam Baths and listening to the fishermen tell me the last great fishing year was in '98. Now, that would have

been 1898 because I was a kid in the '60s and '50s around here.

We have done so much to mess up our environment, I don't know how we're going to fix it, but we better look at it very, very hard. We're talking a hundred some miles of river. If you look just in the state of Oregon, the few culverts that ODOT has fixed has put a hundred some miles of fish habitat open to fishing. There's thousands of miles that are blocked off and doesn't even consider a dam. It's just small little drops.

A six-foot drop is not that much. You take a steelhead that can only jump three and a half foot, not going to make that six foot into the culvert. Habitat is big.

We have so many people in this nation, we can't put blame on anybody right now. The only people we have to point our fingers at is the people who have the power to get the people together in all these two states and a foreign country, Canada, how many states we have in this little map here? A lot of jurisdictions have to get together and say, "We've got to get the job done."

As far as harvest goes, we have to do catch and release on wild fish everywhere in this basin. Anything we do for hatcheries, it has to be fin clip so we can do catch and release. Nets catch everything. We can't do net fishing anymore. It has to be hook and line. I still say you can go

out there and catch fish with a hook and line. Hatcheries, get as much local genetic material as possible and pump out those fish.

Hydropower, we live in a land of cheap electric power. We don't have to have cheap electric power if we need to fix things. We can raise the rates four cents a kilowatthour to five cents. That extra penny per kilowatthour goes directly to this habitat enhancement, not in the pocket of some bureaucrat. There's a lot of money that can be collected by small incremental raises in the price of our power and it will benefit the entire population. Thank you, very much.

MODERATOR: Liz Hamilton.

SPEAKER: Good evening. Thank you for the opportunity to comment tonight. As stated, my name is Liz Hamilton. I have the good fortune of serving as executive director for the Northwest (inaudible) Fishing Association. I represent several hundred businesses in the Northwest that are dependent on healthy salmon populations.

I'm here to voice our strong support for an adoption of an alternative that requires the removal of the four Lower Salmon River dams. I'm still concerned with economics, Colonel, and I'd like to give you a specific example of why.

We lost (inaudible) in a spring Chinook fishery in the main stem that totaled 150,000 angler days. Angler days

are valued in direct expenditures at $83 a day. That's over $12 million in one lost fishery. There are many others.

Now, if you take the fact that we manufacture as an industry, that makes the economic benefit $150 a day and you (inaudible) that $12 million. That one fishery equals the total value of our study.

The other thing we have a problem with is if our economics are so low, why is it that we're being told that the fish can be saved by closing our fisheries downstream? You can't have it both ways. You can't have your cake and eat it, too. Downriver fisheries are an important economic value and an important biological value.

We don't see this administration addressing the federal dams. What we've seen is years of techno fixes, increased barging and trucking of juvenile salmon and a multitude of failed strategies. From our perspective, we haven't spent $3 billion trying to protect salmon, we've spent that money protecting the dams.

In the habitat arena, the inactions speak louder than words. NMFS has yet to consult with the Bureau of Rec on the water spreading in the region. We don't see suggestions that 55 to 75 percent of water withdrawals are eliminated. Temperature pollution reaches near lethal standards every year in the Columbia.

NMFS in the process of approving a dredging of the

Columbia, estuary, an area identified as key to salmon recovery. NMFS' own analysis acknowledges tremendous uncertainties surrounding whether the improvements are actually feasible.

So why are we trading the best science that came out of the path and trading it off with hope for unclear and not actually feasible solutions?

Furthermore, we feel that the results gained by strangling harvesters pales in (inaudible). Breaching these dams would bring back tens of thousands more salmon than could be saved through further harvest cuts.

Less than one percent of human-caused mortalities of wild Salmon River Chinook are attributable to the sport fishing industry. Compare this to 92 percent harvest by the dams. The differences are striking.

I ask, why does this administration turn away from the dams? We wonder if we're sharply attacked in the fishing community because we're the weakest link. That's not science, that's politics.

The fishing industry will not stand for this. We are happy to do our part, but we will not continue to sit by and watch our livelihoods disappear while nothing is addressed substantially in the hydrosystem.

I think the fishing community has paid enough. If we are to save the Snake and Columbia River salmon, the

administration needs to take these killers on and produce a real plan. It's unreasonable that farmers fence, developers and timber operators do buffers, the fishermen are on the beach, while the largest harvester of salmon goes unchecked.

SPEAKER: My name is Ron (inaudible). I'm representing nature, I guess, would be the closest organization I belong to.

Let us as good stewards of rivers and fish resources make decisions that are in harmony with nature. Being in harmony with nature will preserve and protect our abundant resources. Making decisions with nature in harmony will in the long run be cost-effective because they will be successful and the results will be permanent. I feel being in harmony with nature will require the rivers to be restored to their natural state.

Breaching the Lower Snake dams and restoring habitat in the Salmon River basin are actions that would move in harmony with nature. Therefore, I'm in favor of alternative number four, breaching the dams and moving in harmony with nature. Thank you.

MODERATOR: The next three names are Rob Walton, Glen Spain and Frank Amato. Mr. Amato, have you shut the lights off on your Jeep? Are you Mr. Walton?

SPEAKER: I am. My name is Rob Walton. I'm the assistant manager of Public Power Council in Portland. The

PPC members are electrical utilities owned by the people they serve in communities including Clatskanie and Tillamook counties, areas across the eastern part of the four-state region and in cities in all four states. I'd like to comment on both the All-H Paper and the draft EIS.

I'd like to start by complimenting Colonel Mogren on his opening comments, especially the wisdom of seeking common ground. I'm here to do just that. I'm here to compliment those people here in Astoria who have been working on some of the success stories, including the Youngs Bay production facilities.

I'm also here to offer Public Power's support to commercial fishing organizations to take the lead in implementing what NMFS, US Fish and Wildlife Service, ODF&W and WDF&W all seem to want but are not doing fast enough. I'm referring to selective fishing techniques and gear.

Projections for this year's spring/summer Chinook run are up to about 140,000 fish, but 80 percent of those are hatchery fish. NMFS says it won't raise the harvest rates. That means a lot of fish won't be caught. It may mean they aren't allowed to spawn either.

The only organization that responded eagerly to our suggestions that we fund selective fishing tests this year was Salmon for All here in Astoria. We'd like to see this community get Bonneville money as soon as possible,

demonstrate fishing techniques that can allow more fishing with less impact on wild listed stocks. If we don't do that, we're liable to see repeats of the Wall Street Journal article from last week on February 7th that talked about salmon in the dumpsters. Having fewer dams and more salmon won't do any of us any good if they wind up in the dumpsters.

I don't see a plan in place in either the draft EIS or the All-H Paper that would provide protection for dozens of independent populations of wild fish in the Salmon River and robust harvest for tribes and non-tribal fishing at the same time. I believe this community could show us the way towards fishing smarter, and the power industry would like to see you pay to do just that. Thank you.

MODERATOR: Mr. Spain.

SPEAKER: My name is Glen Spain. I'm the Northwest regional director for the Pacific Coast Federation Fishermen's Association. Welcome to Astoria.

Astoria is a town that fish built. Fishing has a long history in this town. It fed the early settlers, built this town more than any other activity. I've seen in the last 30 years, along with construction of the Salmon River dams, a lot of those fisheries go away to the point now where it's not just fish in the upper river that are on the endangered species list, it's fishermen, many of them in this room that are on the endangered species list.

One of the problems with your analysis, and I think it upsets people in my industry more than any other thing, is you completely ignore the fact that the fishing industry in the lower river has been strangled over the last 30 years to provide heavily subsidized transportation in the upper river for a handful of interests.

There are people in this room who no longer have homes, who no longer have livelihoods, and who no longer have boats because of the impacts of the upper river Snake River dams. I think that has got to be included in your analysis.

You assume the baseline economics is zero. In fact, the status quo has a high cost. Anywhere from 300 to 400 million dollars a year in mitigation costs, in spill costs, in transportation costs, and subsidies, subsidies to farms, subsidized irrigation. Those are all costs that must be calculated in your economic equation, otherwise you're really not comparing apples to apples, you're comparing apples to nothing at all.

One of the things you need also to do, and my comments go to both the EIS and the 4-H paper, is you have to look at the four H's. We supported that in Congress, we supported that initiative, but you have to do the numbers. You have to subject all the various H options to the same kind of scrutinized scientific peer-reviewed and economic analysis as the other options on the table.

Failure to do that, again, means you've created a menu of a hope and a wish to grasp at straws rather than deal with the big issue. This is precisely what happened in the late '60s and early '70s when the transportation program was begun. It was never analyzed, it was never subjected to an EIS. The NEPA was adopted several years later. It was grandfathered in, and now we know that in many respects benefits are hard to prove and may be, in fact, counterproductive.

The other thing you need to do is look at all of the options. If you start looking at all of those, you find that the cheapest, most effective and most likely to provide for restored fishery benefits in this community and downriver communities is breaching of those four Snake dams.

Yes, there's habitat protection that can be done. Yes, there are other changes that can be made. None of them will succeed without addressing those four dams. Thank you.

MODERATOR: We're going to give you the honor of trying out our new mechanized system here. Is this working?

SPEAKER: Thank you for warning me about my lights. A little less embarrassing at 11:00.

My name is Frank Amato. I live in Milwaukie, Oregon. I also live in Naselle, Pacific County, across the river. I'm here representing the Willapa Anglers, which is Southwest Washington's leading angling group in Pacific

County, as well as myself.

I publish a magazine called Salmon Trout Steelheader, another one called Fly Fishing and Tying Flies. Both magazines have readerships of 200,000.

Essentially what I'll be telling you is exactly what I preach in the two magazines and will be doing so even more: I think the dams should be yanked out, breached, period. Excuse me.

I would like to comment on the All-H Paper and Corps DEIS. I favor breaching the four Lower Salmon River dams. This will ensure that wild spawning populations of steelhead and salmon do not become extinct. What happens in the Salmon River affects the Deschutes and dozens of our downstream tributaries of the Columbia.

Overloading the Salmon River with hatchery fish will ultimately end in extinction of wild Snake River salmonoids. It will also spell disaster for summer steelhead and salmon on lower Columbia River tributaries.

When you're talking about what goes on in the Salmon River as far as what percentage of the fish are being hurt, you are always talking about extinction, you're not talking about increasing runs. That's what we should be talking about.

When we speak for dam breaching to save salmon, we're inspired by the heavenly spirits of the Chinook Indian

tribes who for centuries treated salmon with respect and dignity for this most marvelous of God's creations.

When you are alongside the Columbia River, I feel the majestic might of the river's spirit and magnificence, but sometimes tragic history.

The Chinook tribes who live in unity with the river are gone and so soon will be their sacred salmon if we do not act now. It's time for citizens of the Northwest to rise up and stop the technological slaughter of smolts and salmon in turbines and hot water reservoirs, and ever more decision-stalling studies.

The citizens in the Northwest, the entire nation, favor strong actions to rip out the fish killers, the Lower Salmon River dams.

The commercial fishing industry of the Lower Columbia was strangled by dams. Few in power cared. Thousands lost their jobs. Now in a more enlightened time and with careful mitigation planning, Salmon River dam area jobs can be reconfigured to ease the change that is scientifically demanded and inevitable.

In the glistening black early morning waters of the Columbia, off Portuguese Point, look into the water and see wild salmon and the ageless spirits of the Chinooks. What have we done to their river?

If alive today, what dam decision would Chief

Comcomely, Captain Robert Gray, Lewis & Clark and John McLoughlin have made concerning saving the wild salmon of the Columbia River? They would say in unison, Long live the salmon, breach the dams.

MODERATOR: Mr. Amato just asked if we want a copy of that. If you have copies of any of this material, please leave it with us or drop it in the drop-off box outside.

The next three, Don Swartz, Jeff Fryer, and Bruce Buckmaster.

Mr. Swartz.

SPEAKER: Good evening. My name is Don Schwartz. I'm a retired fisheries biologist. I worked for the State of Oregon for nearly 32 years. My beat was the Columbia River.

I'm here today to address one of the four H's, particularly the habitat issue. I represent Northwest Sport Fishing Industries Association. We favor breaching. The reason we favor breaching, and I want to talk about habitat issue, the Columbia basin historically produced about 16 million salmon. It had a much bigger watershed in terms of what the salmon could reach than what it does now. We're dealing now about half of what salmon used to utilize within the basin. In that, the half that's still available, 70 percent of the best habitat is in the Snake.

If we lose the Salmon River, the fish go extinct; we don't breach the dams, we lose that production, we're down to

the 30 percent of the half, or 15 percent of the former basin to try and maintain stocks of fish. Well, that won't cut it. The people of the Northwest won't accept that. We won't have harvestable stocks, we won't have meaningful runs of fish. We need to do immediately what we can to save the biggest part of the remaining habitat, which is in the Snake. That's why we're supporting the breaching of dams in the Snake.

In the Snake, we currently have about five major subbasins that are producing fish. Each and every one of those, the Tucannon, the Clearwater, the Salmon, the Grand Ronde and the Wenaha, all of them have major portions of the watershed that are in wilderness, virtually pristine condition. We have some of the best habitat in North America still intact in that system. The fish that are native in those locations are not cutting it.

Habitat isn't the only problem, isn't the biggest problem even. It's obvious that we need to reconnect those habitats with the ocean. That means breaching the dams, getting the things that are killing the fish off out of the way. That's it.

SPEAKER: -- reflecting, however, upon the nature of harvest as the product or result of any labor process, we will not object to the inclusion of harvest as an important consideration in salmon recovery. It is clear that more is harvested from the Columbia River than fish.

The harvesters of fish have earned the right to ask our fellow harvesters to share the burden and responsibility for salmon recovery. As victims of broken promises have resulted in damaged lives and shattered economies, we know what sacrifices approaching 100 percent can do.

The common purpose is a healthy harvest for all. It is unconscionable to do nothing or delay implementation of our best available strategy to return upriver salmon to sustainable levels. We will support programs and public expense to mitigate impact caused by dam breaching. We do not believe that any community should have to undergo unmitigated hardships as experienced by the tribes and the lower river families. Thank you.

MODERATOR: The next three people are Jim Martin, Dick Hellberg and Robert Scheve.

SPEAKER: Good evening. I'm Jim Martin, conservation director for Pure Fishing. I'm a retired fisheries biologist who worked for 30 years for the Oregon Department of Fish and Wildlife, including chief of fisheries. I'm speaking to both documents.

Colonel Mogren said, Let's focus on all listed stocks in the Columbia basin to get the context. I say fine. Where are the specific alternatives from which we can choose here? The ones that recover all the stocks that pass the biological test, the ones that are consistent with the

requirements of the Clean Water Act, of which I see no analysis whatsoever amongst the choices, and the ones that are consistent with treaty rights rather than trading treaty rights off against dams, which do you like better? Finally, consistent with the President's order on the Endangered Species Act never even gets mentioned around here.

Let's choose amongst the options that pass those tests. Let's find out which of our mix-and-match alternatives pass those tests with reasonable certainty giving some uncertainty with science. The ones that are robust to different scientific alternatives, the ones that don't depend on torturing the data to get an assumption.

How can we choose amongst those choices if we don't even understand them? I guarantee you that a lot of the private landowners in the Pacific Northwest would feel a little differently about these alternatives of dams if they knew specifically what you had in mind in terms of strategy for habitat.

I notice that the million acre foot analysis just miraculously disappeared from the Corps' analysis right off the bat because you knew getting a million acre feet out of Idaho would mean to the whole dang process.

Breaching is the only option which is robust enough to be helping all the stocks of this nation, to be moving us forward on the Clean Water Act and consistent with treaty

rights given a wide array of possibilities and certainties or assumptions.

Every independent science review looking at this problem so far has focused on improving a natural river condition and improving natural processes. There's only one option you're considering that moves us in that direction.

With regard to the evaluation of whether John Day should be drawn down, how can you make that decision without a recovery strategy for the Upper Columbia stocks because I think John Day will help the Upper Columbia stocks more than it will for the Snake, particularly if you take the four Snake dams out. Once again, we have one specific option which is being considered in the absence of the context, Colonel, that you talked about.

The bottom line here is avoiding irretrievable decisions. We breach the earthen portions of these dams, we could retrieve that decision if we're overdoing it for salmon, which I submit after 30 years of study is highly unlikely. They go extinct, it's forever. It's irretrievable. If we make the mistake now given the uncertainty of our choices and lose these fish, how in the hell are we going to explain it to our children?

MODERATOR: Mr. Hellberg.

SPEAKER: I'm Dick Hellberg. I'm a lifelong resident here in Astoria and Warrenton. I've been a

commercial fisherman for 40 years. I'm on the Oregon Department of Fish and Wildlife R&E board, incidentally. Additionally, I majored in biology when I was going to college, managed to pick up a master's degree in science somewhere along the line.

The thing that bothers me about this whole process is we've left out the lower river. This has been repeated and repeated. Those of us that live down here and our families have really taken it in the shorts for how many years?

A hundred years it took us to get to this point in this river where you have one percent or is it five percent or maybe ten percent of the total runs in the Columbia River left? What is it? I believe it's probably about five percent. What did they say, a million left out of 16 million? That's a wonderful legacy to leave, isn't it?

Now, what has happened since Grand Coulee? You may (inaudible) the Columbia River sockeye, then 50 years later or sometime considered they were extinct and made a big fuss about a dam or a river -- excuse me, Red Fish Lake up in Idaho. So now you're worried about these dams. One dam at a time, and we're going through all these studies.

One of the things I've learned is that as science studies things, they tend to preordain their results, especially when organizations are involved and wanting

certain results.

Now, this fishery at 16 million fish is around 320 million pounds of salmon. That's about 200 million pounds of harvestable fish that was here at the beginning. I said this one other time at a hearing. I hope the transcriber will get this.

Anyway, that comes out to about $800 million a year in economic benefit. That needs to be figured in when you're figuring out what you're -- what the effect and economic effect is. Let's go back and find out what you destroyed before you decide what you're going to lose because you already lost some of this and some of it can be brought back.

The other thing is on breaching the dams, I fished in Bristol Bay for 30 years. We have had our runs up and down. We had the Japanese on the high seas. They brought the runs down, 40 to 60 million fish, down from tens of millions, five million, 16 million. The Magnuson act comes along. We get the Japanese off the high seas. Get the interceptions gone. Guess what? Turn around and we have record runs of fish. We've had them for over 20 years now.

So what is the difference between Bristol Bay and its watershed and the Columbia River? The difference is the Bristol Bay watershed is a pristine watershed. There is none of man's activities. There's no dams. We don't have endangered species swimming up in those lakes and those

rivers. Our trout aren't in trouble. All these other species that are in trouble are in trouble for the same reason as salmon are.

When you recover the salmon, the others will recover, and the only way you can do it is you've got to get rid of the dams, and the four dams on the Snake are the starting point. You can't have fish if you don't have unimpeded travel to their spawning grounds. You can't raise cattle without calves. You can't have salmon without smolts. That's just plain and simple. Thank you.

MODERATOR: Sybil Ackerman. The next is I cannot read the first name, Dunlap. Then the next one is going to be John Westerholz.

SPEAKER: My name is Sybil Ackerman. I'm the associate regional representative for the Sierra Club. I'm happy to be here today.

I want to make sure that you all know that Sierra Club wholeheartedly supports dam removal, that is no surprise. We also believe strongly that the fishing industry has been unfairly blamed for salmon decline. The Sierra Club has worked hard on two initiatives in Washington and one in Oregon to stop those initiatives because we could have put the industry out of business. Sierra Club also is an active participant in the Save our Wild Salmon coalition. I want to talk a bit about that.

It's a diverse coalition of fishing organizations and sporting groups, business associations, environmental organizations, and energy activists. SOS contains many different perspectives, but we also care about salmon and support removing the four dams that don't make sense.

These banners coming in represent a broad and diverse coalition. It still doesn't begin to incorporate all the organizations, individuals and businesses across the region and the country who support dam removal. These organizations amount to more than six million people. These banners over here represent all of the different organizations that support dam removal and are active members of the Save our Wild Salmon coalition.

The other banner here represents 4200 signatures, only five percent of the 96,000 people who support dam removal in the region and in the country. This is not peanuts. This is a lot of people. This is only just the beginning. Every day, every day more people are learning more about the plight of Salmon River salmon and are stepping forward to say, "These dams just don't make sense."

We have the science, we have economics and now we just need the political leadership, you, to show that we would like to have these four Salmon River dams breached and these fish once again recovered to viable populations. Thank you, very much.

MODERATOR: Sam Dunlap.

SPEAKER: My name is Sam Dunlap. I'm from Home Valley, Washington. My mailing address, I'll give you all that stuff later. It's a bittersweet experience for a native person to attend these hearings because on one hand we're given the illusion of participation; on the other hand we're looking at very sincere, well-mannered, well-intentioned bureaucrats who make promises that they have no intention of living long enough nor staying in one place long enough to redeem.

I don't know any of you, but one of you, one of your grandfathers, one of your great-grandfathers promised my grandfather that if he'd let the dams go in on the Columbia, that you'd protect his fishery. You have failed to redeem that promise.

I live on the banks of the Columbia River, near the confluence of the Wind River. Actually, I don't live on the Columbia River, because it's not there anymore. The Corps of Engineers has this obscene habit of naming what they do to a river some lake, so I guess I really live on the shores of Bonneville Lake.

Once in a while you can see the grandeur that once was the Columbia. There's about a hundred feet below The Dalles dam that you can see what the wild and free running Columbia looked like, but it's a rare sight. Instead what I

see is the toxic sludge that's left from all of the dams and all the pools, all the industrial pollution and thermal pollution and agricultural chemicals and the heavy salts, that's what's left when the Columbia gets to Home Valley. I don't even live on the shores of Wind River, because Wind River is gone, too. I live in the flood pool.

What I wanted to talk about, I also live near the White Salmon River, which was killed forever by the construction of Condit dam, which is about five miles above its confluence with the Columbia.

Now, PacifiCorp, the owner of Condit dam, has made the strategic entrepreneurial decision that retrofitting Condit dam would cost more than the $1.5 million it would cost to remove it. I think that's a good model for dams, and I think it would have happened a long time ago if these Salmon River dams were private dams rather than government dams, and that the careers and the jobs of government employees weren't contingent upon their preservation.

Now comes the news of a recent study published in the Journal of Fisheries that talks about the importance to Northwest ecosystems of the marine organic matter which is imported by salmon from historic levels of near 500 million pounds of fish, where you have now managed Northwest fish stocks down to the point where we have between 26 and 30 million pounds returning to the rivers.

Scientists found marine isotopes of leaves, plants and young fish, even in bare bones. All the wildlife and plant communities in the Northwest depend on the importation of marine compounds. Coho, steelhead, insects and other fish populations survive and thrive on the decomposing carcasses of indigenous fish, or as the native people say, the white salmon.

So this brings me back home to the White Salmon River, the dead, decomposing fish. I ask you please to consider the promise that your grandfathers made to my grandfather, Mr. Howard Chem (phonetic), who lives in a little village at Sigh Island (phonetic). Remember the promise you made to take care of his fish.

SPEAKER: I'm John Westerholm, a long time gillnetter on the Columbia River and a member of the Salmon for All and Columbia River Fishermen's Protective Union, our two fishery organizations. You can add my vote to the unanimous decision so far tonight.

I am a member of a certain way of life here on the lower river, on the estuary, that relates closely to the history and background of the area. This history reflects directly on the natural resource related activity, and in this case fish, fishing and salmon.

Perhaps because of our more rural and direct contact with the land and water, and located where we are, we have

seen and can see what is happening to our once great salmon runs. We watch the adults go up, we watch the fingerlings come down. We see it all here.

I believe firmly in the old medical phrase that an ounce of prevention is worth a pound of cure. When we went a little too far and built some extra dams up on the upper river, we went a little bit too far. Now we have to cure that ill.

Best science, it doesn't take any rocket scientist to understand, is Mother Nature and a free-flowing river wherever we can have it. Leave them alone and they'll do well. Example, the Hanford reach. As with the Missouri, the Columbia can be managed much better. We must bite the bullet and do it. We must give and take in a cooperative manner, of course, but we must do it.

My conclusion is that return the Lower Snake to a free-flowing natural stream, only then can we be absolutely most assured of rebuilding the famous royal Chinook runs that originated in the Snake River and renowned the world around. While we're at it, let's be sure that we use prevention on the lower river and not dredge that ship channel any deeper than it is now. Thank you.

MODERATOR: The next three are Irene Martin, Bob Bernert and Victoria Stoppiello. Irene Martin, are you here?

SPEAKER: Ladies and gentlemen, I'm Irene Martin.

I'm a gillnetter from the Columbia River, and also southeast Alaska. I'm also an Episcopal priest in Cathlamet, Washington.

The box that I brought up here contains many but not all of the documents and background material that I went through to prepare for tonight's hearing. But I think I'd like to use this box as a metaphor for the way of thinking of what's gone on here in the Columbia for over 70 years in which our society as a whole has viewed the Columbia as a body of water that can be altered to serve industrial needs and that any problems that arise can be fixed by applying a technological solution.

Because I think we need to start thinking out of the box, I'd like to start by asking who designed the box that we're in. It was designed by business and the industrial community and the federal government to respond to pressures to develop the inland empire. For over 70 years, the parameters on use of Columbia have been set by the needs of the business community, but not the needs of the fish. We've now reached the point where we have to decide what we're going to do about those fish, and somehow we need to think our way out of this box.

The studies that have been done still bring us to the same point, and the point is that the choice is basically a moral one. Our moral decisions reverberate beyond our

deaths and into future generations.

To give an example, I note that in the document that the Corps calls itself an honest broker. Do you know where that term comes from? Bismarck used it in 1878 to refer to his position in brokering various treaties and strategic alliances in Europe. He was also known as the Blood and Iron Chancellor and his brokering set up the conditions that led up to World War I. I think we would prefer to avoid a similar result in the Columbia, and I'd like to suggest some parameters for thinking to get us out of this box.

We need a paradigm shift from short-term thinking to long-term thinking. We need a climate in the various management agencies where staff feel free to tell the truth. The pretense of somehow trying to appear evenhanded in various documents, when everyone knows that harvest has taken more than its fair share of hits, creates biterness and cynicism among members of the public, fishermen and agency employees alike.

We need to shift our thinking from focus on immediate gain and quick solutions to a immediate problems, to a long-term concern for the health of the river as an ecosystem. We need a change from thinking about remnant runs and gene pools to thinking in terms of what abundance looks like, if not in our own time, then in the time of our grandchildren and beyond.

We need to be thinking about what it means to leave a legacy, not just of our own personal property such as money, jewelry and our stuff, but of diversity, beauty, health and the splendor of a natural world that includes abundant salmon. Thank you.

MODERATOR: Rob Bernert.

SPEAKER: I'm Bob Bernert with Bernert Barge Lines. I've got about a million concerns regarding the repercussions from removing and breaching the Salmon River dams. Two of them that I've not heard from -- heard any comments on is world hunger and global warming.

If we breach the Salmon River dams, we will be making the world's largest single contribution ever to world hunger and global warming. To contribute to global warming, we will burn an additional 1.8 billion gallons of fossil fuel each year to replace the four million horsepower now produced by the emission-free, fuel-free dams.

To contribute to world hunger, the United States will destroy the Salmon River navigation system, our highway to the export market, and also remove 35,000 gallons -- 35,000 acres from irrigation. I have a few interesting facts I'll run through here, first regarding our world's food supply.

20 percent of the world's population is undernourished. World population is six billion today. It

will be 11 billion 50 years from now. 19,000 children now die each day on this planet from malnutrition. Advancements in pesticides, fertilizers and genetic engineering have helped double the world's food supply in the past 25 years, but the population has almost also doubled in the past 25 years.

Over three million tons of grain is barged down the Salmon River every year and distributed around the world. One-third of the world's food harvest is grown on irrigated land. We must increase our acreage under irrigation, not decrease it. We must improve our infrastructure, not destroy it.

Regarding fish, pit tag (phonetic) studies indicate fingerling survival is as good as before the dams were built, thanks to the many improvements on the Salmon River dams. Chapter 5 of the US Army Corps of Engineers draft Lower Salmon River juvenile salmon migration feasibility environmental impact statement points out the extreme risks of removing the dams due to turbidity problems and so forth.

West coast salmon harvest in 1905 was 50 million fish. This is west coast salmon harvest in 1930, it doubled to a hundred million fish. West coast salmon harvest in 1984 increased to 150 million fish. By 1990, it was up to 240 million fish, a 70 percent increase in harvest between '84 and '90.

I have a bunch of other facts, but I see my time is up.

SPEAKER: I'm Victoria Stoppiello. I live in Ilwaco, Washington, which I refer to as the no longer fishing town of Ilwaco.

I wore the right shirt tonight. It says Solar Saves Salmon. The last person referred to the fact that taking down the dams and loosing five percent of our power production would mean that we would automatically go to burning fossil fuels and contributing to global warming. Well, that's not necessary. I think we should be investing in renewables. I think we should be putting a solar water heater on every house. I think we should have wind farms in the Columbia Gorge.

We have alternatives to the dams in terms of the power production. As far as I'm concerned, we should go for alternative number four, in other words, the maximum protection approach.

Part of my reason is just because I'm a romantic. My father was a commercial fisherman. His father was, and my great-uncle was, too, all from Ilwaco. My dad sold his boat and license in 1980. That's the last time that anyone in our family fished.

The other thing the gentleman mentioned was that there's a problem about food production. Well, one of the

things is some of the people who have really studied poverty and hunger worldwide say it's not a problem of volume, it's a problem of distribution. Part of distribution problem is in this country because we waste something like 25 percent of the food that's produced in the United States. Let's not dump it on the problem that we've got to feed the world by damming the river and keeping the fish from making it upstream and downstream.

The other thing is, I don't have a lot of sympathy for the irrigators. I think something in the last six years, both the states of Oregon and Washington studied the maintenance of the pump stations on both sides and found that roughly half the irrigators didn't bother to put the $2 screens on their pumping stations, therefore pumping smolts and other fish up into the fields.

I realize that a $2 screen was a cost, you had to hire a scuba diver to maintain them. I don't think the irrigators need to continue to get a free ride. If they are to get free water, I think it's time for them to come up and help earn their way.

I want to read something very brief. This is from a 1948 publication from the Columbia River Packers Association, this is a 1948 publication which referred to the building of these dams in '48.

Navigation interests are the principal backers of

the dams which have destroyed this resource. They want the taxpayers of the country to spend hundred of millions to (inaudible) for them, a highway toward which they would not make one cent direct distribution either from building or maintenance.

Well, that was 50 years ago. It's time to correct that mistake. Our predecessors made some mistakes, we can see that. It's time for us to correct those problems. Thank you.

MODERATOR: The next three, Steve Fick, Peter Huhtala, then Anthony Stoppiello.

SPEAKER: My name is Steve Fick. I also like Bruce Buckmaster represent Salmon for All tonight. Some of the points I'd like to make are economic points.

I attended the meeting in Lewiston. I got a different perspective on this issue. From that meeting, what I came away with was concern for transportation and costs of getting wheat downstream and irrigation. I propose we subsidize those. Breach the dams, drawdown John Day, subsidize the transportation from Lewiston down to the Tri-Cities. From there you can barge it down and they can have business as usual and we can get on with recovering salmon.

We've lost 25,000 jobs here in the Astoria area, Columbia River, to this salmon problem caused by the dams. I

want to know why a job in Lewiston is more important than a job in Astoria. All we have done is shifted. I don't think that's right.

I think, as Mr. Jim Martin said earlier, you're not looking at the clear science. It's just simply being ambivalent about this and not addressing the problems, not coming forth with solutions. It's a delaying tactic that is simply allowing business as usual for everyone else on the river except for us here in the lower river.

Sometime you can't keep blaming harvest, you can't keep blaming something else, ocean conditions. We're going to have to address the problem. We're running out of people to blame.

I think it's clear that the best science shows that breaching the dams is part of the major solution to this. We have to address that. I also push the Corps' economic study which says there's only $2 million benefit. I'll challenge that. We can address that at a later time. That's clearly torturing the facts here.

Just in my small business alone, I have a processing plant, there's more than that economic impact to myself, and people that work for me. It's just one little processing business.

I think that by law you have to -- NMFS has to address the science. They're not a political body. They

have to make the best scientific analysis possible and make those recommendations. We have water quality laws here, thermal pollution. We have to address those.

Simply if you would follow the laws and follow the laws in the past, we probably wouldn't be in as nearly the perilous situation we're in right now. That's my advice and I'd appreciate your consideration. Thank you.

COLONEL ERIC MOGREN: Sir, I just want to make a comment on something. How much I appreciate the fact that you took the time to go up to Lewiston to hear what the other end of the river had to say and what their concerns were. I want you to know I appreciate that. Thank you.

SPEAKER: I'm Peter Huhtala, executive director of Seadog, the Columbia deepening opposition group. Really pleased to be here, hi.

I had a nightmare last night. Senators Ron Wyden and Slade Gorton were standing out on the deck at the Port of Portland dredge auctioning off the last of the Salmon River salmon. There before me, as the corporate sponsors clapped gleefully, were politicians from the Northwest selling salmon down the river.

As my alarm went off, these renegade representatives got a wake-up call. The first federal lawsuit to halt the channel deepening plan had been filed in Federal Court by some seriously powerful plaintiffs. The most aggressive

assault ever planned on the Columbia River estuary is now exposed before the entire nation.

I believe that the citizens of this country will not stand for this unjustified destruction. The message from salmon lovers from one end of this basin to the other is the same: Stop driving these fish to extinction. We want our salmon back and we want them back bad, but we're going to have to take a couple big steps in my nightmare is to be averted.

Yeah, drawdown the John Day reservoir, breach the Lower Salmon River dams, do it swiftly and do it right, and take exceptional care of the good people in the Lewiston area and other areas that are affected by this action. Treat them like royalty for the sacrifices they have to make.

The other big step is to change some ways that the Columbia estuary is managed. The deepening project is the worst possible way to manage the Columbia River estuary. To quote a bit from the Valentine's Day card that NMFS got yesterday, the project will have significant unquantified, unexamined and unexplained adverse effects on young salmonoids among a host of impacts, changes in water quality, ecosystem function, sediment transport, turbidity, restriction of contaminated sediments and changes in solidity intrusion in the estuary affecting its productivity and suitability to support salmonoids.

Now, we must insist that this plan to eviscerate the lower river be abandoned immediately. Further, if the Corps is going to maintain the present navigation channel, they're going to have to make some changes. We want no new Caspian tern habitat, no more sediments dumped back into the river, utter respect for salmon and other life of the estuary. Stop doing more harm. Stop polluting and degrading this place. We don't make things better by making them worse. Then we can get on with the essential business of making this river better, taking untold numbers of small steps to restore and enhance this watershed.

The steps we need to take to nurture salmon from the streams of their birth to their miraculous transformation in this precious estuary to the ocean and hope again, that's the legacy we can leave for our children's children. We don't need to leave a nightmare.

MODERATOR: Anthony Stoppiello.

SPEAKER: I'm Anthony Stoppiello. I live in Ilwaco. I'm here to speak for all of those that eat salmon, especially the (inaudible) that live in the small streams that eat off the bodies of their dead parents.

I want to talk about energy. The Columbia River is one big energy system. We keep ignoring that. If we breach these four dams and drawdown the John Day, we'll be taking one big step for humanity and a small step for salmon.

I'd like to tell you what we did for salmon. We live in a house that was built in 1895. We moved into that house in 1992. That house was using 13,460 kilowatthours of electricity. The average house in the state of Washington under the Washington Energy Code used 11,900 kilowatts of electricity. From 1993 to 1996, we did the following:

We insulated our house, we put double-glazed windows in our house, we put a foundation on our house, we brought a Sunfrost refrigerator which uses a half a kilowatt of electricity a day, we have a passive solar water heating system on our house which provides us with 60 percent of our water use, we're going to put on a solar PV net metered system which means that the utility company will be paying us the same amount for electricity that we give back that we buy.

From 1993 when we were using 10,520 of kilowatthours, we are now using 3,494 kilowatts of electricity, which is a savings of 67 percent. Now, imagine for a moment what would the system, the electrical system, the context look like if we had a 67 percent reduction in our electricity? What would that habitat look like? It certainly wouldn't like what we have now, dams from Bonneville to who knows where.

What I would suggest and what I would hope would happen is I would like to see energy as an issue brought into

this discussion. What would we do with that saved energy? Let's not sell it. Let's save it and let's take down dams. I would love to see Celilo Falls again in my lifetime.

MODERATOR: We're about halfway through the testimony. Folks have been sitting here for about two and a half hours. Why don't we take a ten-minute break. The three people that will be up for speaking, Aaron Huhtala, Dwight Curo, Tom Wolf.

(Pause in proceedings.)

MODERATOR: We'll resume here. Take your seat so that we can get moving again.

COLONEL ERIC MOGREN: Before we start, I'd like to make a point. When I was up giving my presentation on the John Day piece, I mentioned that the brights would increase with the John Day drawdown, and the spring would not. I had my notes transposed. The gentleman caught me on that. He was right. I want to make sure there was no misunderstanding on that.

MODERATOR: For those of you who are not coming in here and staying out there, if you could just hold the conversation down a little bit. It sounds like a slow roar in here. If you could quiet down outside or come on in so we can resume.

Before we begin the next three presenters, I want to repeat a few of the ground rules. We want you to stick to

the three minutes. I know that some of you had more than three minutes to say. If you can try to organize what you're saying in those three minutes so that when the red light goes on, that doesn't mean you have another minute, that means your three minutes are up. I'd like you to wind it up in the next few seconds if you could. We have a lot of other people who want to say something. We'd like to give them a chance, too.

The other thing that I heard from a few people, the loud claps and the roars of approval and so forth of supportive of your point of view, but there are other people who may not agree with your point of view. It is a deterrent to them wanting to be able to come up and speak. We have to have a completely fair hearing here and it doesn't do us any good or the people hearing what you're saying any good for the loud demonstration. If you could keep that to a minimum, we'd appreciate it.

The third thing I wanted to mention is that the court reporter who is trying to transcribe what you're saying here is having a very difficult time keeping up with some of you who when you reach the third minute or the second minute start speeding up because you realize you only have a minute left, and you have about three-quarters of a speech left to say here. It's sort of double-time after that. We're not recording it. It's doing little good unless you give us a

copy of your written comments. But if we're relying on what you've spoken and we can't keep up or follow, and the court reporter can't record it, then it's lost. You might consider that how you say what you want to say.

We've got the next three speakers. Aaron Huhtala, Dwight Curo and Anthony Stoppiello.

SPEAKER: Hi, I'm Aaron Huhtala. I live in Astoria. I don't eat salmon, but I think we need to save salmon. The $25 billion or whatever to remove the four Salmon River dams, Ice Harbor, Lower Monumental, Lower Granite and Little Goose, will be a small price to pay for the priceless cost of keeping them. If they're gone, we can't bring them back.

One of the deterrents is the Caspian terns feeding on salmon on Rice Island, so we need to act quickly. If you like to see the dams, you know, the powerhouse, spillway, they would stay. 25,000 jobs in Astoria have been lost due to all these dams. Lewiston, they can benefit from not having dams. It's going to be hard, but we can do it.

Bristol Bay is pristine. Either -- without dams, salmon won't need to suffer from the supersaturation of nitrogen. They only need to suffer from the agricultural contaminants. They won't be sucked into pumps from farmers that don't take consideration. Irrigated land near the Salmon River are polluting the rivers with pesticides, containing high concentrations of nitrogen and other

sediments. The pump stations don't have screens. I think we need to increase the federal regulations and restore 140 miles of the river for salmon. Thank you.

MODERATOR: I know several people have come up already and crossed their names off because we went ahead and used the tape-recorder out there in the lobby. That's still available for you.

The next one is Tom Wolf.

SPEAKER: My name is Tom Wolf. I'm the Oregon council chair of Trout Unlimited. I thank you for allowing me to have this time. I'm from Hillsboro. I missed the Portland meeting because I was down playing in Bend when that meeting was going on.

First of all, Trout Unlimited is a national organization of 100,000 members, 2,000 here in Oregon. As such, I have a different perspective. We sometimes forget that the Columbia River is not only a Northwest treasure and the salmon of the Columbia River are a Northwest treasure, but it's a national treasure.

People from all over the country contact me all the time asking me what are we doing to protect the salmon in the Columbia River system and what we do to ensure they will be around for future generations.

Trout Unlimited would like to propose some things that other people already said. First of all, we need to

breach those four Lower Salmon River dams. We need to look at our hatchery programs, and we need to in our hatchery programs make sure that we change some of the current practices so that the wild unique genetic traits of native stock are protected.

We need to look at our habitat and make sure that we do all to protect the pristine habitat and restore the degraded habitat. We need to look at our harvest methods so that wild fish, when we harvest them, are protected as much as possible.

We also need to realize that using wild fish, we can restore the runs, we can bring them back to the levels of the rivers in Alaska, the rivers in Canada, so that someday there will be a thriving commercial fishery here in Astoria, someday that we will be able to use the fish in the Columbia system and feed the people that are starving in other parts of the world. We need to realize that. Unfortunately, people in Lewiston will be harmed, but we can do a lot to help them in their plight.

Lastly, I'd like to mention something that hasn't been mentioned, is the sockeye run of the upper Snake. We haven't mentioned that. We haven't talked about that. If we do not remove those Lower Salmon River dams, that stock will go extinct. Extinction, as people will tell you, is forever. Thank you, very much.

MODERATOR: Kent Martin.

SPEAKER: Ladies and gentlemen, my name is Kent Martin. I've been a commercial gillnet fishermen on the lower Columbia River and Alaska for over 40 years. I wouldn't dream of posing as an expert on hydraulics or fisheries biology, but I remember vividly what the fishery was like here 40 and 30 years ago. I most assuredly am an expert on harvest.

In recent decades, I've seen harvest with the remotest connections to Salmon River salmonoids virtually eliminated in the Lower Columbia and reduced in significance all over the Pacific coast. Still publications from the US Army Corps of Engineers and NMFS are liberally sprinkled with suggestions of further harvest restrictions or a ten-year moratorium.

The aforementioned, even though in the last five years harvest mortalities for Salmon River while the spring Chinook in the Lower Columbia have averaged zero, less than (inaudible) fish and the treaty catches averaged about 37 fish.

Hydroelectric dam passage losses on the other hand have averaged 221 fish, a whopping 38 percent of the run. Turning to Salmon River wild fall Chinook, passage losses exceed all harvest mortalities, ocean and in-river combined. Moreover, if one factors in the juvenile mortalities and

converts them to adult equivalents, accounting for disease and degradation, we find that the hydrosystem harvests 88 percent of the adult population.

So why is harvest still on the table and why are harvest regimes of seven and eight decades ago enthusiastically paraded before the public? Because the moral leadership, and using "moral" in its most poetic sense here, has been assumed by those business interests and groups who are competing for the resources that salmon must have to survive: cool, clean, free flowing water.

The public agencies who should be providing moral leadership in the form of clear choices based on objective science have been reduced to pandering dubious swamp root salmon recovery schemes to the public that leaves the Salmon River system entirely intact and calls for yet more studies, of course.

I would agree that all of the studies and hearings are aimed at saving -- I would argue that all the studies and hearings are savings even expanding the commercial industrial sector, not the salmon population. Indeed, more studies and proposed techno fixes are a win-win for the business community in the Columbia-Snake system. Every day of delay, there's another day of business as usual.

Finally, I want to talk about the economic study that the Corps proposed. It was called improving salmon

passage of December 1999. Once again, I can only comment on those portions that bear on my expertise.

I find it unbelievable that on page 39, the Corps would purport that dam breaching, which would reopen 140 miles of prime fall Chinook spawning and rearing habitat, a 70 percent improvement, would create only 249 long-term jobs in the Lower Columbia and on the entire coast.

You will have to excuse me, but I remember what the existing fishery was like. Even modest increases in populations would allow a few incidental takes in harvest and have enormous benefits from the treaty Indian fishery clear to southeast Alaska. That a public agency would pointedly ignore such factors in its economic analysis is not surprising to a cynic like myself, it is after all an election year.

MODERATOR: I apologize. Mr. Martin was the first of three. I should have mentioned that the second speaker was to be T. Jefferson, and the third one is Don Abing. Mr. Jefferson, T. Jefferson, not sure if it is mister. Thomas Jefferson.

SPEAKER: Humble servants of the Republic, people of Astoria, I Thomas Jefferson am roused from my eternal rest to set right the scurrilous shadows cast upon my name and the name of my most beloved soldiers by many of those who settled this grandness of the Upper Louisiana Territory you call the

Northwest.

Listen carefully lest one of your politicians misquote me as Westerners so frequently do in defense of their skullduggery. I gave no instruction to Captains Lewis and Clark that they should find the most magnificent bounty of salmon in the world, only so a nation could come forth and lay ruin to it. To do so would have been a crime upon this country, upon this community, and native peoples of this land.

Rather, they were dispatched to find the Northwest Passage and in seeking that route expressly told they must cultivate peace, harmony and good neighborhood with the native peoples that they encountered.

My vision was that we become partners with these peoples during the 100 generations that I estimated it would take to fill the Upper Louisiana. Imagine my heart when I read these words of Captain Lewis telling of discoveries of a place not far from where we are tonight. "We proceeded to the top of the mountain and faced the sea. From this point, I beheld the grandest and most pleasing prospects which my eyes ever surveyed. And to my front, a boundless ocean, a most romantic appearance. My men told of rivers so thick with salmon that one could travel across its banks on the backs of these majestic fish." The telling of the mighty Columbia River, Captain Lewis wrote, "This immense river

water is one of the fairest portions of the globe. As we passed on, it seemed scenes of visionary enchantment would never have an end."

How in error both Captain Lewis and I were. In a tenth of the time that I estimated, my nation's citizens both settled the Pacific Northwest and greedily all but erased the majesty of this land. An unmatched bounty of salmon disappears in the clutches of profligate waste.

In these modern times, the thundering majority of the citizens of the Republic, as at this hearing, are calling upon you to remove four dams and give the salmon back the essence of what they must have, a free flowing river. The message is for more than just salmon, but for the preservation of democracy. These are rivers of the people, not the rivers of a moneyed few who seek to intimidate and ignore the people of the country.

Your duty is to honor the tradition my men established here nearly 200 years ago, to right the wrong of such heartless destruction of nature's richness, to make your violations of your promise to the natives of good neighborhood and peace. Such will require a stiff measure of what many so-called leaders lack: courage.

You've heard it from my allies, Captain Lewis and Clark, we have seen your prowess as damning the salmon, now it's incumbent upon you to restoring the bounty of salmon

this region once possessed, a task you can only accomplish if you chart your way as the dam-dismantling Corps of recovery. I thank you.

MODERATOR: The next one is Don Abing.

SPEAKER: That's pronounced Don Abing. Thank you for allowing me to speak briefly with you tonight. I know you're not from this community. I'm here to paint a small picture of a person that's blue-collar. I'm not a commercial fisherman, although I butt heads with that user group.

Actually, I'm speaking on behalf of two displaced user groups. My family, my wife who is a Native American, and my children and grandchildren, who are also Native Americans, belonging to the proud Chinook tribes of the Pacific Northwest.

As a young lad of 18, I should say I'm here only because my son said, "It's your last chance on earth to speak your peace." Here I am in just a short plus 50 years, incredibly amazed as how fast the dams have proliferated the entire Columbia River system.

As a young lad of 18, I joined many hundreds of my age group that supported themselves through school and other activities as a by-product of the commercial fishing industry here in Astoria, Oregon. As a native Astorian, I enjoyed working the summer months processing salmon. We were processing salmon many, many times throughout the years,

throughout a calendar year.

I am proud to have worked or been employed with the once proud Elmore Cannery in Astoria, Oregon. Few people here know - I don't know if you do - that that was a living cannery at one time that was on the National Historic Register list. Of course, it went by the way of everything else, was destroyed in a fire, everything else gone.

But anyway, also I just wanted to say that I'm sad to be able -- not to be able to pass anything but pictures of times that I had spent as a young lad fishing for spring Chinook salmon that were bound for the Salmon River. I also am proud to have been part of a small part of history of sport fishing -- excuse me, sporting goods store here in Astoria, Oregon, that has long gone that at one time received a fantastic award for selling a humongous amount of sport fishing gear that supported several families, and one in particular.

The part that disturbs me the most is that I can empathize with those people, the irrigators, the people of eastern Washington and Oregon, but I can't sympathize with them. I know they are now on the eve of what our families have experienced living here in this community.

MODERATOR: The next three, Herman Mende, Les Clark, then Carl Merkle.

First off is Mr. Mende.

SPEAKER: Thank you. It's not easy following these great speakers, especially the great white father, Thomas Jefferson. I come as yet another Sierra Club activist and retired federal employee.

I command you, Colonel, on your professionalism and the great civil service you brought to us tonight to explain all the facts. As the Sierra Club, we often have to go to court to have help (inaudible) along to enforce the law that Congress made. We know no matter what plan you come up with, how better Congress will short you on the funds to put it forth. You know that.

Sierra Club, it's do or die time for the salmon on the Snake. If the dams stay, the salmon go extinct 30, 40 years ago, I went up and saw these wonderful fish ladders that were supposed to solve all the problems. Then we have fish friendly turbines. All these wonder vessels had gone to not. $3 billion is wasted.

Yes, there are statistics. There's minimalizing. But the salmon are still on their way to extinction. We would help you. I'm not going to say to (inaudible), maybe a little better, but there's plenty of money to do better.

There's no flood control on these four dams. Power, there's only five percent. Not a big deal. Get rid of them. As far as irrigation, there's 13 pumps that need to be built down at water level which would take care of the irrigation

needs. There's also shipping of grain up and down the river. China has a $60 billion deficit with us. We're feeding China and Russia, carrying grain down. Perhaps they could chip in a little and subsidize. We don't need to subsidize deficits, do we? That's on the transport.

Yes, there's a lot of wind going up and down this Columbia River gorge. In fact, there's even some hot air. Sometimes hot air comes from the east. Power can easily be replaced. They say just on the great planes of the Midwest that we have 1100 percent power just from the wind. Of course, you have to be very careful because these windmills kill the birds and we will be out again to protest your killing of birds.

But I come not as a cynic, I come as part of the majority that will prevail. So when we merely transfer some of the costs from the subsidies of the corporations, take them off of a little welfare, and put it in for the good of the river.

I wanted to mention that I went to two congressional hearings put on by John Dolittle who wants to build a very large dam, we have to march around chanting, "No dam, Dolittle." San Jaochim with the dam that went in near Fresno, it killed the salmon. There's a lot of people waiting for all the salmon to die so they can go on with big business. Amen.

MODERATOR: Les Clark.

SPEAKER: Thank you, panel members. My name is Les Clark. I live in Chinook, Washington. I'm representing the Northwest Gillnetters Association today.

I'm thinking back a little bit. I guess I'd have to go back about 30 years when the lower four Salmon River dams were built. At that time the salmon industry on the lower river took a look at the fish passages that they had on those dams, and they were absolutely atrocious. We knew when those four dams went in at that time that we were road kill. Now 30 years later, I'm not surprised that I'm standing here testifying because we knew it then what we'd be looking forward to now.

When those dams were built, the rest of the dams, what we really needed was an allocation of water for the fish. If the fish would have at least a fair break with all the rest of the allocations that were going to come into effect, they could have held their own. But without a water allocation, and everybody else had water allocations, they didn't have a fair break.

So we are at this time trying to come up with solutions. I'm not going to be repetitious of a lot of the other statements that have been made. They've been great statements.

So I have to say that water is a very precious

commodity. All users need water. The farmers need water. The fish need water. The whole basin needs water. But we have to come up with a balance. We have to come up with a balance so we can retrieve some of the mistakes that we have made. We have lived and learned by them. So we don't need to repeat those mistakes.

We took the commercial industry off of the summer Chinooks in 1964. We're still in the same sorry state right now. We was off of the Chinook in '77. We're still in a sorry state right now. We talked about lease back, buy back. The industry stepped up and made an effort to put our harvest on the table for rebuilding runs. We still had a couple groups fishing on both sides, so we wondered how much our effort was being done to produce those fish to the spawning grounds to rebuild runs.

So we have a lot of things hanging out there that is not being considered and hasn't got finished. So you people have those decisions to make. I hope the studies will prove some of these things that we will see the light to bring these fish back.

So I would echo the comments made by Glen Spain, Don Swartz, Sam, Jay, the basin four treaty tribes that we (inaudible) with those people. Thank you.

MODERATOR: Carl Merkle? We'll go to the next list of three then. Bill Hebert, Steve Gray and Kathy Taylor.

SPEAKER: Hello, I'm Bill Hebert. I was raised in Port Angeles. I started commercial fishing when I was a junior in high school, salmon trolling. We used to fish from Alaska all the way down to California. We had a pretty good life. We enjoyed -- I enjoyed the fish, I enjoyed the ocean, the very clean and healthy.

But now I can see that my hindsight that we have is maybe not going to be enough. If we're going to be really realistic about it, honest and logical, instead of political and do what someone thinks is right versus doing the right thing.

Say 30 years from now things prevail, there are no more fish, the aluminum industries are almost gone, lumber, and therefore clean air is going. The rest of the planet is warming, the polar caps are melting. We've decided that we have to live under domes now because the radiation content has increased because the ozone has decreased.

Perhaps this is the way of mankind. If we're not able to learn from each other and truly understand reality, it will teach us a lesson that we do not have to survive. We can be dead. We can no longer make decisions that involve our planet. Our planet will do it for us.

See, Mother Nature is many more times stronger than man, and therefore Mother Nature will win when she wants to, and man may decide, and women may decide, to fight back for

the right thing, if we fight back soon enough, quick enough.

See, all these hearings and compilations of data may never be fast enough or soon enough to fix the problem. It took how many years to get where we are now? Logic dictates it will take that many more years to come back to where we were.

So if we breach the dams, I say we have to breach them all. One, we have to consider alternative power sources, clean power sources that are technologically available now, solar, electrically solar, tidal energy, wave energy, and go on to these, grow, develop, instigate new ideas. If we do not do this, the dams will be just one of the dominoes that will leave man to his own deathly outcome.

Now, I was going -- three minutes are up. I wasn't looking at the light. Sorry. I'll be precise now.

What I wanted to do was tell you what was on this piece of paper. After everybody talking about technical information, I thought it was my moral obligation to scare you into reality. That little red light bulb is not real to me because the reality is its value is not as important as my words. If you don't hear my words, then I don't have much value either.

MODERATOR: Steve Gray.

COLONEL ERIC MOGREN: If you'd like to enter the written piece into the record so we have that, even though

you didn't read it, we'd --

SPEAKER: Too many misspelling errors.

MODERATOR: Steve Gray not here. Kathy Taylor.

SPEAKER: I'm Kathy Taylor. I'm the director of CREST, the Columbia River Estuary Study Task Force. CREST, as many of you know, is a council of governments, including Washington and Oregon, cities, ports, and counties, soil and water conservation district, surrounding the Columbia River estuary.

CREST has been dealing with salmon issues among others in the Columbia River estuaries for over 25 years. I'm glad that you see fit to seek input from the communities surrounding the Columbia River estuary here on the subject of salmon recovery. The communities here really care about these issues a lot as well as other issues related to salmon decline.

CREST has been involved in giving input on Columbia River channel deepening project at every stage at which input has been allowed. Our governing body, CREST Council, which is elected officials from the local governments, cities, counties, port districts, directed CREST staff to look at the environmental impact statement for the channel deepening project to see what impacts the Columbia River estuary communities and the estuary itself would likely have from that, see if there's any reason for the communities

surrounding the Columbia River to be concerned.

After our analysis, we came up with some issues that were of concern. We have shared those in a formal comment letter with the Corps of Engineers. We have shared those with the public through several public meetings. We have also shared those concerns with the Federal Caucus through a formal letter which we've not received any apply from so far.

I hope that the Federal Caucus will seriously consider all of the tough choices involved in salmon recovery, including the impacts of the proposed channel deepening project. The channel deepening project stands to harm our already dwindling stocks of salmon, and so far I have not seen the Federal Caucus give that issue much attention. I hope that's corrected.

MODERATOR: The next three, and I'm not sure if I'm pronouncing this correctly, Maria Denison, second one is Chuck Blight, next one is Rena Taylor.

SPEAKER: Hi. The lower --

MODERATOR: Say your name.

SPEAKER: I'm Marcie Denison. The four Lower Salmon River dams must be breached. Ever since our mountain watersheds were clear-cut, our forests scraped of absorbent topsoil, people below have been told they are in a floodplain and have to put their houses on stilts. Let's put the dams on stilts and let the salmon through.

The Snake and its many tributaries and springs have been rightfully home to salmon for millions of years. Farmers have no right to waste water by spraying it into the -- spraying it into hot summer air. Most of it evaporates before it hits the ground. Drip irrigation doesn't waste water.

The fishermen have as much right to work as farmers do. No one has a right to destroy an Indian treaty or make a species go extinct. If one species was making all the humans go extinct, we'd be all upset about that.

Design dolphin-safe release traps to replace gillnets. Let's have a second channel across land for bay drainage, riprap where no harm to habitat has been surveyed first. Clear-cuts by ODF on Hahn Bray Ridge and above snow lines throughout the state land must be outlawed. Not move your town where it's in the way of our logging impact. Not move your salmon that's in the way of our dams. Empire building Washington was a Roman thing. Maintaining our natural resources is more delicate and more important.

Let the salmon go home to the Snake system spawning grounds. Plus please don't dredge the Columbia any deeper. Also hot water from the land causes global warming and weather changes. Outlaw clear-cutting everywhere. Thank you very much.

MODERATOR: Chuck Blight? If not, Rena Taylor.

SPEAKER: My name is Rena Taylor. I appreciate you having these meetings. I'm a local teacher. I've been an educator for 15 years. The Corps of Engineers has, I believe, over the years become a bit impaired in their ability to be compassionate toward the people it serves and also in their ability to think critically.

In the past 100 years, the eyes of many landowners and communities have witnessed injustices and exercises in futility.

Dr. Robert Ornstein (phonetic) of Stanford University, who was with Richard Perry in the split brain research, was a part of the team that received a Nobel prize, speaks of the western intellectual tradition, otherwise known as TWIT, and of the SOB, or same old brain. It would seem that this genre of thinking, which the Corps seems to use when it creates its panels of documentation, such as the Columbia River deepening FEIS, is just much too rampant.

I would encourage with my neighbors that the dams be carefully and considerately breached. I would also recommend that the US Army Corps of Engineers possibly consider some community service repairing some damages already done. Maybe you could begin with the removal of Rice Island created by the Corps where more than 20,000 Caspian terns now feed off of buckets of salmon smolts by the hour. It is no longer acceptable to do your accounting without accountability.

Thank you.

MODERATOR: The next three, Sandra Moilanen, Charles Wooldridge, Pete Ferrero. Is Sandra here? Charles Wooldridge?

SPEAKER: My name is Charles Wooldridge. I'm from Tillamook County. Born in Spokane. I've lived in Oregon for 44 years. In that time, I've really grown to love the state and all the many things that are here.

What I'm reminded of tonight, what I've been reading about, is something that I'm proud of in Oregon. That is when issues come up and they deserve a lot of consideration and weight, eventually something rises to the surface which we can count on here in Oregon, and that is common sense.

Part of that common sense has to do with habitat. For me, the habitat issue in the Snake is the four dams. NMFS, if your job is to properly manage salmon, there is only one choice, and that is to remove the dams. Army Corps of Engineers, if all true economic realities are considered, there is only one choice, and that is to remove the dams. These waters that calling wild fish back. They need those dams gone. That's all.

SPEAKER: I'm Pete Ferrero, originally from Chicago. I remember rivers dying because various bureaus and politicians favored industry. I saw catfish by the thousands belly up and scream to the shores to escape the poisons. I

know what that is. We're dealing with lots of things, poisons and lots of things.

With the economic study, I would like to see a continuance of the study outside of the basin, down river through to the Columbia River plume. Can you imagine how many hundreds of millions of dollars that represents that the Corps has not invited into the discussion?

I also would like the Corps and its face people, you, Colonel, your generals, you have names, you have children, you have parents, and I wonder what your legacy is going to be. Is it really going to be honesty? I don't trust them for a minute. Unfortunately, I want to trust you, but I don't for various reasons that I think have already been spelled out.

What I'd like to do is just read a poem, a little aesthetic maybe. It's entitled salmon.

When rains subside in summer months, waters settle from winter's fury.

Ripplets form as migrants glide, their fluid forms which heed no hurry.

Betray the frenzy yet to happen, beneath the cooling alder lotion.

In shallow pools with gentle currents, they lay in wait, their transformation.

The surface calm, reflective shimmers, with

micro-ships their blossomed sails.

Concedes to rites of ancient times, as hooked beaks meet the slash of tails.

Great oceans serve their platters full of herring, shrimp and sometimes krill.

By sun, the stars, a scent to trail, they home their flight to water's still.

Their silver scales reflect a rainbow when time draws near to procreate.

Clear waters churn and choke with silt as darkened bodies seek their mate.

Carved nests of gravel by undulation serve as womb to milt and roe.

Water foams with fish in torrents strewn, with river milk, their seeds to sow.

Within a moon, the beds lay silent, no splash or waves will break the night.

Scarred and rotting, last gasps of life, reserve like kind in noble sight.

Corpses corrupting along the bank, sustain the young, those yet unborn.

Through winter's storm of ravaged flows, this species sinews stretched, not torn.

Yet this fish of fishes remains in contest not with nature's stresses.

Tis dams and 'cides beyond description which rape this fish by man's transgresses.

Thank you.

MODERATOR: The next three. Bob Rees, Don Tuschoff and Doug Thompson.

Bob Rees.

SPEAKER: My name is Bob Rees. I'm commenting on the 4-H paper. I am a full-time fishing guide educated in fisheries technology. I received over -- I derive over half of my annual income from the Lower Columbia Lake, formerly known as the Columbia River. I represent a tiny portion of the community that depends on Columbia Lake salmon as a source of income: Charter operators, Native Americans, fishing guides, commercial fishermen, motel owners, bait and tackle shops, gas stations, both manufacturers and scores of other micro-industries also depend on the Columbia salmon to provide for their families.

Fortunately we now have the science to save Columbia Lake salmon from extinction and save these important industries from destruction. After years of pointing fingers at who's to blame for the decline of our salmon, we refuse to do that any more. The problem is obvious: hydropower.

Breaching the dams is the only option we have left. We lose ten percent of the total downstream migrating salmon at each dam. The carnage must stop. Cutbacks in hatchery

production will further destroy our economies. Modifications are being made to solve hatchery and wild interaction. Reduction in harvest levels is not the answer. Sport and commercial fishermen lost those opportunities decades ago when closures were placed on Columbia spring and summer Chinook fisheries. Those runs continued to decline.

The answer is to breach the dams. The effect is immediate, decisive and efficient. Restore Columbia Lake to the free flowing, salmon producing Columbia River and do it soon before it's too late. Thank you.

MODERATOR: John Tuschoff. Doug Thompson.

SPEAKER: Good evening. The hour is late. I'm tired. How about you? My name is Doug Thompson. I am a member of the Astoria City Council. I'm proud to represent Ward 3. I also represent the City of Astoria on the CREST Council, and I also have the pleasure of serving on the board of C Resources, Incorporated, a 30-year-old non-profit hatchery program that's engaged in watershed restoration across the river in Chinook, Washington.

In the interest of time, I'm not going to touch on hatcheries or harvest. I want to confine my remarks to habitat and hydro.

In terms of habitat, I don't think frankly, I don't mean to pick on any one agency, but I don't think NMFS can talk to us very credibly about habitat issues. I know you've

called out for the importance of habitat. We know that. If NMFS in particular was interested and serious about habitat issues, you wouldn't have issued the biop you did on channel deepening. You can't talk about habitat and the estuary and dig that ditch deeper.

In terms of hydro in the four Snake dams, I want to tell you, I've been an elected official for about ten years. It occurred to me that there was a moment when I knew that those four Snake dams are going to come out. That occurred slightly less than a year ago when Oregon Senator Gordon Smith and Representative Greg Walden held I forget what they called it, a summit of sorts in Pendleton, and they announced that the four Snake dams were off the table, no longer for discussion, now we can get on with the serious business of talking about salmon recovery. That's the moment I knew those four dams were coming out. I don't know when, but I know they're coming out.

Despite ten years as a politician, I remain an optimist. I'm not a cynic. I'm optimistic for several years. Number one, you're here tonight, and I thank you for coming. Number two, there was a lawsuit filed, and I know how that's going to come out. We're going to win. Number three, there is a powerful river-long coalition that is formed around salmon recovery composed of conservationists, commercial fishers, sports fishers, tribal fishers, and the

businesses who will benefit from salmon recovery.

For those of us who are serious about saving salmon, and please believe us, we are very serious about salmon recovery, we have a science on our side, the economics, the law, and the people. Those dams are coming out. Thank you very much.

MODERATOR: We have the last group of three here. Robert Warren, Matt Van Ess and Stan Johnson. Is Robert Warren here? Come on up.

COLONEL ERIC MOGREN: Those are the last three that have signed up?

MODERATOR: Yes.

COLONEL ERIC MOGREN: Anybody else here who wishes to make a statement that has not signed up?

SPEAKER: My name is Robert Warren. I am the natural resource specialist for CREST. I've just got a brief statement here. You'll be hearing from us in the future in more written detailed format.

I would like to direct my comments on the All-H Paper and specifically towards the habitat issue.

We at CREST are encouraged to see the increased level of awareness and attention being focused on the estuary and its critical role in supporting salmon of the Columbia River base. New and existing data suggest that the estuary can be limiting with regards to smolt survival and fitness.

As you have heard, we are currently faced with a proposed federal action that by most accounts has the potential to continue the long-term trend of habitat degradation in the estuary and in the lower river. I'm speaking of channel deepening.

The National Marine Fishery Service has released a favorable biological opinion with associated terms and conditions that includes intensive monitoring and restoration efforts, efforts that could cost tens of millions of dollars. Fulfillment of these terms and conditions are contingent upon congressional appropriation of funding. If sufficient funding is not provided, there is no real assurance that any restoration or monitoring will take place, especially considering most of that mitigation and monitoring is to occur after the construction of the 43-foot channel.

We have seen no statement from the Corps that it agrees with NMFS' assessment of impacts or it is committed to make a sincere effort to fully comply or secure funding to comply with the terms and conditions. This federal action appears to be in conflict with the goals and objectives of the recovery plan proposed by the federal caucus.

"The objectives of habitat options under consideration by the Federal Caucus are to prevent further degradation to tributary and estuary habitat conditions and water quality, protect the existing high quality habitats and

restore habitats on a priority basis."

It is our opinion after having reviewed the final and the draft EIS that construction of the 43-foot channel is likely to degrade water quality and is likely to result in diminished habitat complexity among other things.

It's also been our observation, both as an observer and as a participant in the NEPA process, at least in this case, that we have perceived the susceptibility of some state and federal agencies to political pressure. For this reason we believe there is a real need for greater accountability of all federal actions to ensure that the interests of the natural resources are adequately represented and protected. Thank you.

MODERATOR: Matt Van Ess.

SPEAKER: Good evening. My name is Matt Van Ess. I'm the coastal planner at CREST. Thanks for the opportunity. I'm comments on the all H's.

About a year and a half ago, CREST received a 2000 page plus now infamous channel deepening EIS released by the Corps of Engineers and sponsored by the upriver ports.

On review of the draft EIS, CREST found that channel deepening as proposed would result in significant impacts to the natural resources of the estuary, threaten salmon recovery efforts in the Columbia River basin and harm the local economy.

CREST also found upon review that the draft EIS violated the Natural Environmental Policy Act, the Endangered Species Act, Coastal Zone Management Act and the Clean Water Act. Our comments on the draft EIS were ignored and a final EIS was relieved.

Here is a copy of the Oregon Department of Land Conservation and Development disagreement with the Corps's determination of coastal zone consistency. In other words, channel deepening violates the Coastal Zone Management Act. Latest news as of today, yesterday I guess, is the Northwest Environmental Advocates, et al., complaint challenges the National Marine Fishery Service no jeopardy biological opinion on channel deepening. It violates the Endangered Species Act. NEPA and Clean Water Act suits are also justified and may follow.

The Corps did not listen to our concerns. They made little adjustments to the final EIS. Now the Port of Portland's plan to deepen the river three feet at the expense of the natural resources and communities of the estuary is in jeopardy. They didn't listen.

I also have a letter here of November 19th, 1999 letter that Kathy Taylor, my boss, referred to. It's a CREST letter to the Federal Caucus. We emphasize the importance of the Columbia River estuary for salmon, that all out-migrating smolts and in-migrating salmon (inaudible) Columbia River

basin must pass through and spend time in the estuary.

The letter also emphasizes the impacts to salmon that will occur from channel deepening.

CREST asks then and will ask again now for the Federal Caucus to add dredging and dredge material disposing to the habitat alteration and conservation dialogue of the all H salmon recovery. Thanks.

COLONEL ERIC MOGREN: Do you want those documents in the record?

SPEAKER: Sure. I'll enter two of them.

COLONEL ERIC MOGREN: Just hand them up to me. I'll make sure they get in.

MODERATOR: Mr. Johnson.

SPEAKER: My name is Stan Johnson, local commercial fisherman. We have paid for turning this river into a series of lakes drained by a ditch with salmon. If we wish to save the salmon, the four Salmon River dams have got to go. However, even that will be in vain if we don't also control predation by birds and marine mammals. We have to have the courage to do all that is right for salmon on all the river, but we have to have the courage to pay the debt with salmon that our development requires.

The salmon and the dams are not compatible. We cannot have both. The cost is much too high. Thank you.

MODERATOR: One more speaker, Jerome Arnold. Is

there any else who wants to speak here tonight? This is our last speaker.

SPEAKER: My name is Jerome Arnold. I reside in Cannon Beach. I'm a member of the Clatsop soil and water conservation district, I'm the director.

What I want to talk about is mitigation. Some of the mitigation that has taken place in other times, like when they went to build the dams, they said any side effects like loss of salmon and stuff will be mitigated through the use of hatcheries. Well, I fish. They thought that mitigation would, you know, fix that side effect. Well, it's pretty obvious that it didn't.

These other -- the dredging mitigation there won't take place at some time after the dredging has been done, and meanwhile if the fish go extinct, we don't have any problem and we don't have to worry about it and won't even have to mitigate because there won't be anything to live in there.

I wanted to be rather -- speak for somebody that I don't really have the right to speak for. That's the tribal fishers. From my understanding, the tribal people that live here, to them salmon are literally their brothers and sisters. The salmon represent something very much larger to those people, and they should to us. They represent courage. They undertake incredible journeys and overcome incredible obstacles. They can't make it over the dams.

There's something that is very terrible happening to -- excuse me -- suicide in the tribal people is epidemic. I wonder how much of that is a connection between being -- you know, their example, their heroes, the salmon, can no longer make it upstream and be rewarded by generating another generation. Side effects like that can't be mitigated. Thank you.

MODERATOR: Thank you all very much. We appreciate your support and cooperation on this.

Did you want to have any concluding thoughts here?

COLONEL ERIC MOGREN: Yes.

Let me first of all commend you all in your stamina for seeing this through to the bitter end. I also appreciate the cordiality and courtesy that you've shown to the speakers, even a few that didn't agree where you were coming from. That speaks well to the citizens of Astoria. I want you to know how much we appreciate being out here and appreciate what you have to say. We'll hang around for a few minutes if anybody has any questions they'd like to ask. Short of that, this meeting is adjourned.

(Meeting adjourned.)